



ISO: 9001-2008

**Monthly progress Report of  
Transmission Projects awarded  
through  
Tariff Based Competitive Bidding  
(TBCB) Route  
(As on 31.03.2019)**

**Government of India  
Ministry of Power  
Central Electricity Authority  
New Delhi**

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|                                                                               |          |           |
|-------------------------------------------------------------------------------|----------|-----------|
| <b>Total Transmission Projects</b>                                            | <b>:</b> | <b>41</b> |
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## **(1) Name of transmission project - Transmission system associated with IPPs of Nagapattinam/ Cuddalore Area – Package A**

### **Background**

This transmission scheme has been planned for evacuation of power from various generating station being developed by IPPs in Nagapattinam/ Cuddalore area.

### **Scope of transmission project**

1. Nagapattinam Pooling Station-Salem 765 kV D/C line
2. Salem - Madhugiri 765 kV S/C line

### **General Details**

|                                      |   |                                                                               |
|--------------------------------------|---|-------------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : | Powergrid Nagapattinam-Madhugiri Transmission Limited (A subsidiary of PGCIL) |
| Bid Process Coordinator (BPC)        | : | Power Finance Corporation                                                     |
| Levellers Tariff (Rs. Crs)           | : | 98.702                                                                        |
| Request for Qualification            | : | 28.05.2011                                                                    |
| Request for Proposal                 | : | 20.09.2011                                                                    |
| Letter of Intent                     | : | 06.03.2012                                                                    |
| Transmission Service Agreement (TSA) | : | 02.02.2012                                                                    |
| SPV acquisition                      | : | 29.03.2012                                                                    |
| Transmission License by CERC         | : | 20.06.2013                                                                    |
| Tariff adoption by CERC              | : | 09.05.2013                                                                    |
| Contract Performance Guarantee       | : | 29.03.2012                                                                    |
| Clearance u/s 164 of EA2003          | : | 09.12.2013                                                                    |
| Execution plan submitted to CEA      | : | 28.05.2011                                                                    |
| NIT issued on                        | : | 13.07.2012                                                                    |
| EPC contract awarded on              | : | 16.05.2014                                                                    |
| Scheduled Date of Completion         | : | 28.12.2015                                                                    |

### **Status of progress of transmission project**

Work awarded on 16.5.2014 to M/s Gammon and M/s ICOMM.

1. Nagapattinam Pooling Station-Salem 765 kV D/C line

|           |          |
|-----------|----------|
| Length    | 203 Km   |
| Locations | 543 Nos. |

**Line commissioned on 23.10.16.**

2. Salem - Madhugiri 765 kV S/C line

|           |          |
|-----------|----------|
| Length    | 219 km   |
| Locations | 575 nos. |

**Line completed on 31.12.18. DoCo declared on 26.01.19.**

**Transmission Project commissioned in Jan, 2019.**

## (2) Name of transmission project -Transmission System associated with IPPs of Vemagiri Package-A

### Background

The transmission corridor covered under the present project has been evolved to evacuate power from the proposed IPP generation projects in the Vemagiri area, Andhra Pradesh. Vemagiri area in Andhra Pradesh has huge potential of Gas based generation projects due to availability of Gas in Krishna-Godavari basin. The availability of the Gas as fuel has attracted many IPP developers to establish power plants in the vicinity. In this regard, 4 nos. of IPP generation projects with the total installed capacity of about 5400 MW have been granted LTA for quantum of 5150 MW. Further, as per the connectivity applications made, there are few more generation capacities likely to be available in the vicinity.

In view of above, considering the huge generation potential in this area a comprehensive transmission system has been planned so as to take care of the evacuation needs of generation projects of Vemagiri area. For this a 765/400 kV pooling station at Vemagiri (GIS) is to be established through LILO of Gazuwaka – Vijayawada 400kV S/c with bypass arrangements. All the power from different power plants will be pooled at this pooling station through 400kV transmission lines. The power so pooled at Vemagiri Pooling Station shall be further dispersed through high capacity transmission corridors of 1xD/c 765kV lines towards Hyderabad via Khammam to supply target beneficiaries in Southern region through displacement.

Further the generation project has target beneficiaries in Western Region & Northern Region of about 1230MW & 450 MW respectively, for this power transfer a 765kV high capacity corridor have been planned viz. Hyderabad – Wardha – Jabalpur Pooling station 765 kV D/c lines. These high capacity transmission lines in conjunction with the already planned High Capacity Power Transmission Corridor – IX i.e. Jabalpur Pooling Station – Orai – Bulandshahr 765 kV S/c shall provide adequate transmission capacity for transfer of power to target regions.

### Scope of transmission project

1. Vemagiri Pooling Station–Khammam 765 kV D/C line -I
2. Khammam - Hyderabad 765 kV D/C line-I

### General Details:

|                                      |   |                                                                 |
|--------------------------------------|---|-----------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : | Powergrid Vemagiri Transmission Limited (A subsidiary of PGCIL) |
| Bid Processor Coordinator (BPC)      | : | Rural Electrification Corporation (RECTPL)                      |
| Request for Qualification            | : | Not Applicable as project scrapped                              |
| Request for Proposal                 | : | Not Applicable as project scrapped                              |
| Letter of Intent                     | : | Not Applicable as project scrapped                              |
| Transmission Service Agreement (TSA) | : | Not Applicable as project scrapped                              |
| SPV acquisition                      | : | 18.04.2012                                                      |
| Transmission License by CERC         | : | <b>Not Applicable as project is scrapped</b>                    |
| Tariff adoption by CERC              | : | ----do---                                                       |
| Contract Performance Guarantee       | : | ----do---                                                       |
| Clearance u/s 164                    | : | ----do---                                                       |
| Execution plan submitted to CEA      | : | ----do---                                                       |
| NIT issued on                        | : | ----do---                                                       |

|                                |   |                  |
|--------------------------------|---|------------------|
| EPC awarded on                 | : | ----do---        |
| Scheduled Date of Completion   | : | 17.04.2015       |
| Anticipated Date of Completion | : | Project scrapped |

**Status of Progress of transmission project:**

Project has been scrapped Vide Order dated. 06.04.2015, CERC has directed that Project is not required to be implemented and ordered Generator/CTU to pay the cost of SPV to POWERGRID in 80:20 ratios. Generator has challenged the CERC order in Appellate Tribunal and outcome is still awaited. Regulatory approval for the Project has been withdrawn by CERC.

### **(3) Name of transmission project -Transmission system for Strengthening in Southern Region for import of Power from ER**

#### **Background**

A Common High Capacity Transmission Corridor was planned for ISGS generations in Srikakulam area, which includes Srikakulam Pooling Station – Angul 765kV D/C line and Angul – Jharsuguda - Dharamjaigarh 765kV D/C lines. However, developments in coal regulation in Indonesia, Australia and other countries have resulted in slowing down of capacity addition based on imported coal. As a consequence, the Southern Region is expected to be a net importer of power from neighbouring regions. Under such uncertainty of generation projects and delay in implementation, the Southern Region may need to import huge quantum of power, which may need augmentation of existing / under implementation / planned inter-regional links. Under this transmission scheme, an additional inter-regional AC interconnection between Southern and Eastern regions is being established through Srikakulam Pooling Station to Vemagiri 765kV D/C line. This additional inter-regional link shall facilitate import of power to meet the requirement of power from other surplus regions. However, with the import through this link, beyond Khammam towards N'Sagar, critical loadings were observed and therefore, Khammam – N'Sagar 400kV D/C line is being envisaged to address such critical loadings. This line shall facilitate in dispersal of power to Southern Region constituents beyond Khammam.

#### **Scope of transmission project**

1. Srikakulam PP – Vemagiri-II Pooling Station 765kV D/c line.
2. Khammam – NagarjunaSagar 400 kV D/c line.

#### **General Details:**

|                                     |   |                                                                 |
|-------------------------------------|---|-----------------------------------------------------------------|
| Special Purpose Vehicle (SPV)       | : | Powergrid Vizag Transmission Limited<br>(A subsidiary of PGCIL) |
| Bid Process Coordinator (BPC)       | : | Rural Electrification Corporation                               |
| Estimated Cost (Rs. Crs)            | : | 1180                                                            |
| Levellised Tariff (Rs. Crs)         | : | 231.134                                                         |
| Request for Qualification           | : | 26.10.2012                                                      |
| Request for Proposal                | : | 06.03.2013                                                      |
| Letter of Intent                    | : | 31.07.2013                                                      |
| Transmission Service Agreement(TSA) | : | 14.05.2013                                                      |
| SPV acquisition                     | : | 30.08.2013                                                      |
| Transmission License by CERC        | : | 08.01.2014                                                      |
| Tariff adoption by CERC             | : | 23.01.2014                                                      |
| Contract Performance Guarantee      | : | 29.08.2013                                                      |
| Clearance u/s 164                   | : | 21.05.2014                                                      |
| Submission of execution plan to CEA | : | Dec.'2013                                                       |
| NIT issued on                       | : | 08.10.2013                                                      |
| EPC Contract awarded on             | : | 12.03.2014                                                      |
| Scheduled Date of Completion        | : | 29.08.2016                                                      |

#### **Status of progress of transmission project**

Work awarded on 20.05.2014 to M/s TPL, M/s ICOMM, M/S L&T and M/s Gammon

**1. Srikakulam PP – Vemagiri-II PS 765 kV D/C line**

- Length 668 CKm, Locations: 877 nos.

**Line completed on 30.09.16**

**2. Khammam (existing) – Nagarjunasagar 400 kV D/C line**

- Length 145 ckm, Tower Locations 388 nos

**Line commissioned on 31.12.15**

**Project Commissioned in Sep-16.**

#### **(4) Name of transmission project - ATS of Unchahar TPS**

##### **Background**

Feroz Gandhi Unchahar TPP-I to III (5x210MW) in District Raebareli, Uttar Pradesh is an existing generation of M/s NTPC Limited. The generations are at 220kV and are being evacuated through 220kV lines. M/s NTPC has now proposed augmentation of generation capacity by developing 1x500 MW at Feroz Gandhi Unchahar TPP (FGUTPP-IV). The beneficiaries along with quantum as informed by M/s NTPC are UPPCL (167.38MW), UPCL (23.19MW), Delhi Discoms (72.39MW), Haryana Discoms (33 MW), Rajasthan Discoms (64.67 MW), HPSEB (18.91 MW), PDD (38.4MW), EDC (Union Territory of Chandigarh) (3.46MW). The step up voltage of the generator is at 400kV and the proposed generating station is 1km route length from existing generating station. M/s NTPC Limited had submitted application for connectivity and Long Term Access and was discussed during the Connectivity and Long Term Access meeting held on 19/12/2011. During the meeting, it was discussed and agreed to connect the new generation directly to Fatehpur 765/400kV Substation of POWERGRID through 400kV D/C. Fatehpur is a major substation in Northern Region. Beyond Fatehpur, there would be two numbers of 765kV Lines to Agra. Agra is also well connected with high capacity 400kV and 765kV lines. Hence, no constraint is envisaged in evacuation of power to its beneficiary.

##### **Scope of transmission project**

1. Unchahar – Fatehpur 400 kV D/C line

##### **General Details**

|                                     |   |                                                                 |
|-------------------------------------|---|-----------------------------------------------------------------|
| Special Purpose Vehicle (SPV)       | : | Powergrid Unchahar Transmission Limited (A subsidiary of PGCIL) |
| Bid Process Coordinator (BPC)       | : | Rural Electrification Corporation                               |
| Estimated Cost (Rs. Crs)            | : | 70                                                              |
| Levellised Tariff (Rs. Crs)         | : | 16.771                                                          |
| Request for Qualification           | : | 11.01.2013                                                      |
| Request for Proposal                | : | 17.10.2013                                                      |
| Letter of Intent                    | : | 14.02.2014                                                      |
| Transmission Service Agreement(TSA) | : | 20.12.2013                                                      |
| SPV acquisition                     | : | 24.03.2014                                                      |
| Transmission License by CERC        | : | 21.07.2014                                                      |
| Tariff adoption by CERC             | : | 03.07.2014                                                      |
| Contract Performance Guarantee      | : | 20.03.2014                                                      |
| Clearance u/s 164                   | : | 06.05.2015                                                      |
| Execution plan submitted to CEA     | : | July'14                                                         |
| NIT issued on                       | : | 25.07.2014                                                      |
| EPC contract awarded on             | : | 21.01.2015                                                      |
| Scheduled Date of Completion        | : | 24.09.2016                                                      |

##### **Status of progress of transmission project**

###### **1. Unchahar – Fatehpur 400 kV D/C line**

- Length: 106 ckm, Locations: 145 nos.
- Line completed on 24th Sep'16. The power flow started only after completion of NTPC Unchahar bays in Dec.'16.

##### **Project Commissioned in Dec-16.**

## **(5) Name of transmission project- NR System strengthening Scheme-NRSS-XXXI (Part-A)**

### **Background**

Kala Amb/ Poanta/ Giri area is an existing load centre in Himachal Pradesh with a present power demand of about 350 MVA, which is likely to increase about 500 MVA. However, the available generation and transmission network in the area is not adequate to meet the present load. In order to meet the present and future load requirement of the area, this transmission scheme has been proposed. Further considering the issue of hilly terrain & scarcity of land in Himachal Pradesh, the substation shall be established as GIS station and the LILO would be carried out on Multi-Circuit Towers to conserve R-o-W. Karcham-Wangtoo-Abdullapur 400kV D/C line is an existing Quad conductor line and is connected in the grid in parallel to triple snowbird lines. In order to increase the loadability of this line for better sharing of load, 40% series compensation on 400 kV Karcham Wangtoo – Abdullapur D/c line is proposed under the scheme. This would not only improve the loadability of 400kV Karcham Wangtoo 400kV D/C line but also help in reducing the oscillations in the area.

### **Scope of transmission project**

1. Establishment of a 7 x 105 MVA (1- ph.), 400/220 kV GIS substation at Kala Amb

#### **400 kV**

- Line Bays: 4 No.
- 400/220 kV ICT: 7 x 105 (1-ph)
- ICT bays: 2 no.
- Bus Reactor (80 MVAR): 2 no.
- Bus Reactor Bay: 2 no.
- Space for line/ICT bays: 4 no.
- Space for ICT: 1 no.

#### **220 kV**

- Line Bays: 6 no.
- ICT bays: 2 no.
- Space for line/ICT bays: 4 no.

2. LILO of both circuits of Karcham Wangtoo – Abdullapur 400 kV D/C (Quad Moose) line at Kala Amb (on multi Ckt towers)
3. 40% Series Compensation on 400 kV KarchamWangtoo – Kala Amb quad D/C line at Kala Amb ends

### **General Detail**

|                                      |   |                                                         |
|--------------------------------------|---|---------------------------------------------------------|
| Special Purpose Vehicle(SPV) Limited | : | Powergrid Kala Amb Transmission (A subsidiary of PGCIL) |
| Bid Process Coordinator(BPC)         | : | Rural Electrification Corporation                       |
| Estimated Cost (Rs. Crs)             | : | 225                                                     |
| Levellised Tariff (Rs. Crs)          | : | 59.434                                                  |
| Request for Qualification            | : | 01.08.2013                                              |
| Request for Proposal                 | : | 09.12.2013                                              |

|                                      |   |            |
|--------------------------------------|---|------------|
| Date of Letter of Intent             | : | 26.02.2014 |
| Transmission Service Agreement (TSA) | : | 02.01.2014 |
| SPV acquisition                      | : | 12.05.2014 |
| Transmission License by CERC         | : | 21.07.2014 |
| Tariff adoption by CERC              | : | 03.07.2014 |
| Contract Performance Guarantee       | : | 08.05.2014 |
| Clearance u/s 164                    | : | 27.04.2016 |
| Execution plan submitted to CEA      | : | Sept'14    |
| NIT issued on                        | : | 21.04.2014 |
| EPC contract awarded on              | : | 09.12.2015 |
| Scheduled Date of Completion         | : | 12.07.2017 |
| Anticipated date of completion       | : | 12.07.2017 |

### **Status of progress of transmission project**

1. 7x105 MVA, 400/220 kV GIS at Kala amb with 40% series compensation on 400 kV Karcham Wangtoo – Kala Amb D/C line at Kala Amb end

**Work completed and DOCO declared w.e.f. 12.07.17**

2. LILO of both ckt of Karcham Wangtoo - Abdullapur 400 kV D/C line at Kala Amb

**Work completed and DOCO declared w.e.f. 12.07.17.**

**Project Commissioned in July 2017.**

## **(6) Name of transmission project- Transmission System associated with Gadawara STPS (2x800 MW) of NTPC (Part-A)**

### **Background**

NTPC Limited (NTPC) is establishing coal based Gadawara STPS (2x800 MW) generation project at Gadawara, Narsinghpur District in the State of Madhya Pradesh. NTPC Limited has been granted LTA for 1586.51 MW as per the LTA application and the details of drawl of power is given below:

|        |            |             |           |
|--------|------------|-------------|-----------|
| CSPDCL | 63.46 MW,  | MPTradeco   | 793.25MW  |
| GUVNL  | 209.86 MW, | MSEDCL      | 261.49 MW |
| Goa    | 10.47 MW,  | DNH         | 6.03 MW   |
| DD     | 3.96 MW,   | Unallocated | 237.99 MW |

Transmission Scheme was planned for the evacuation and supply of power from Gadawara STPS to the beneficiaries of the generation project. This transmission system strengthening shall facilitate immediate evacuation as well as supply of power to its beneficiaries with reliability and security. Beyond Solapur dispersal of power to the beneficiaries of the generation project shall be through existing/planned transmission network under inter-state Transmission System. The Transmission System has been split into two parts viz. Part A and Part B and both part-A and Part-B of Transmission scheme is to be implemented in the same time frame.

### **Scope of transmission project**

1. Gadawara STPS – Jabalpur Pool 765 kV D/C line\*  
\*Considering the time schedule of generation project, an interim arrangement through LILO of existing Seoni – Bina 765 kV S/C line shall be established at Gadawara STPP. At a later date, LILO portion would be de-linked from Seoni – Bina 765 kV S/C line to restore the Seoni – Bina 765 kV S/C direct line, and the LILO portion shall be extended to Jabalpur 765/400 kV pooling station to form Gadawara STPS – Jabalpur Pool 765 kV D/C line.
2. Gadawara STPS – New Pooling Station near Warora 765 kV D/C line.
3. LILO of both circuits of Wardha – Parli (PG) 400 kV D/C Quad line at Warora Pooling Station (Near Warora) (2 x D/C).
4. Establishment of 2x1500 MVA, 765/400 kV New Pooling Station near Warora.

#### **765 kV**

ICTs: 7 x 500 MVA, 765/400 kV (1 spare unit)

ICT bays: 2 no.

Line bays: 6 no.

Bus reactor: 3 x 110 MVAR

Bus reactor bay: 1 no.

Line reactors: 7 x 110 MVAR (1 unit spare) (for Gadawara line)

Line reactors switchable: 6 x 110 MVAR (for Parli line)

Space for future bays: 4 no.

#### **400 kV**

ICT bays: 2 no.

Line bays: 4 no.

Space for future 400 kV bays: 4 no.

## General Details

|                                      |   |                                   |
|--------------------------------------|---|-----------------------------------|
| Special Purpose Vehicle (SPV)        | : | Powergrid Warora Transmission Ltd |
| Bid Process Coordinator (BPC)        | : | Rural Electrification Corporation |
| Levellised Tariff (Rs. Crs)          | : | 290.147                           |
| Request for Qualification            | : | 14.08.2014                        |
| Request for Proposal                 | : | 14.11.2014                        |
| Letter of Intent                     | : | 11.03.2015                        |
| Transmission Service Agreement (TSA) | : | 09.02.2015                        |
| SPV acquisition                      | : | 24.04.2015                        |
| Transmission License by CERC         | : | 05.08.2015                        |
| Tariff adoption by CERC              | : | 23.06.2015                        |
| Contract Performance Guarantee       | : | 18.04.2015                        |
| Clearance u/s 164                    | : | 22.04.2017                        |
| Execution plan submitted to CEA      | : | July'15                           |
| NIT issued on                        | : | 08.06.2015                        |
| EPC contract awarded on              | : | Sept.'15 onwards                  |
| Scheduled Date of Completion         | : | November 2017*                    |
| *Revised Schedule Agreed by LTTCs    | : | January 2018                      |
| Actual Date of completion            | : | July, 2018                        |

## Status of progress of transmission project

### (1) Gadarwara STPS - Jabalpur PS 765 kV D/C line

- Length: 15.5 km
- Locations: 43 nos.

**Progress:** Line completed on 23.11.2016 and DOCO declared on 30.11.2016

Stage-2 : Dismantle the LILO and extend Line upto Jabalpur S/S,

- Length: 87.5 ckm
- Locations: 227 nos.

**Progress:** Line completed on 23.05.2017 and DOCO declared on 31.05.2017

### (2) Gadarwara STPS- Warora P.S. (New) 765kV D/C line

Length 313.3 km  
Locations 837 nos.

**Progress:** Line commissioned on 10.07.2018

### (3) LILO of both Ckts. of Wardha - Parli at Warora (New) Pooling Station

Length: 98 km  
Locations: 269 nos.

**Line commissioned in May'18.**

**(4) 7x500 MVA, 765/400 kV Warora (New) pooling station**

- COD : July' 18

**Transmission Project commissioned on July, 2018.**

## **(7) Name of transmission project - Transmission System associated with Gadawara STPS (2x800 MW) of NTPC (Part-B)**

### **Background**

NTPC Limited (NTPC) is establishing coal based Gadawara STPS (2x800 MW) generation project at Gadawara, Narsinghpur District in the State of Madhya Pradesh. NTPC Limited has been granted LTA for 1586.51 MW as per the LTA application and the details of drawl of power is given below:

|        |            |             |           |
|--------|------------|-------------|-----------|
| CSPDCL | 63.46 MW,  | MPTradeco   | 793.25MW  |
| GUVNL  | 209.86 MW, | MSEDCL      | 261.49 MW |
| Goa    | 10.47 MW,  | DNH         | 6.03 MW   |
| DD     | 3.96 MW,   | Unallocated | 237.99 MW |

Transmission Scheme was planned for the evacuation and supply of power from Gadawara STPS to the beneficiaries of the generation project. This transmission system strengthening shall facilitate immediate evacuation as well as supply of power to its beneficiaries with reliability and security. Beyond Solapur dispersal of power to the beneficiaries of the generation project shall be through existing/planned transmission network under inter-state Transmission System. The Transmission System has been split into two parts viz. Part A and Part B and both part-A and Part-B of Transmission scheme is to be implemented in the same time frame.

### **Scope of transmission project**

1. Warora (Pooling Station) – Parli (New) 765 kV D/C line.
2. Parli (New) – Solapur 765 kV D/C line
3. Parli (New) – Parli (PG) 400 kV D/C (Quad) line
4. Establishment of 2 x 1500 MVA 765/400 kV Parli (New) S/S

#### **765 kV**

ICTs: 7 x 500 MVA, 765/400 kV (1 spare unit)

ICT bays: 2 no.

Line bays: 4 no.

Bus reactor: 3 x 110 MVAR

Bus reactor bay: 1 no.

Line reactors: 7 x 110 MVAR (1 unit spare) (for Warora-Parli (new) 765kV D/c line)

Space for future bays: 4 no.

#### **400 kV**

ICT bays: 2 no.

Line bays: 2 no.

Space for future 400 kV bays: 4 no.

### **General Details**

|                               |   |                                   |
|-------------------------------|---|-----------------------------------|
| Special Purpose Vehicle (SPV) | : | Power grid Parli Transmission Ltd |
| Bid Process Coordinator (BPC) | : | Rural Electrification Corporation |
| Levelling Tariff (Rs. Crs)    | : | 256.727                           |
| Request for Qualification     | : | 07.08.2014                        |

|                                      |   |               |
|--------------------------------------|---|---------------|
| Request for Proposal                 | : | 14.11.2014    |
| Letter of Intent                     | : | 11.03.2015    |
| Transmission Service Agreement (TSA) | : | 09.02.2015    |
| SPV acquisition                      | : | 24.04.2015    |
| Transmission License by CERC         | : | 10.07.2015    |
| Tariff adoption by CERC              | : | 23.06.2015    |
| Contract Performance Guarantee       | : | 18.04.2015    |
| Clearance u/s 164                    | : | June' 17.     |
| Execution plan submitted to CEA      | : | Nov'16        |
| NIT issued on                        | : | 22.06.2015    |
| EPC contract awarded on              | : | Sep'2015      |
| Scheduled Date of Completion         | : | January, 2018 |
| Actual Date of completion            | : | June, 2018    |

### **Status of progress of transmission project**

#### **1. Warora Pooling Station - Parli (New) 765 kV D/C line**

Length: 347 km  
Locations: 920 nos.

**Line commissioned in June 2018.**

#### **2. Parli (New) - Solapur 765 kV D/C line**

Length: 118 km  
Locations: 311 nos.

**Line commissioned, DoCo declared on 27.04.2018**

#### **3. Parli (New) – Parli (PG) 400 kV D/C (Q) line**

Length: 18.2km  
Locations: 52 nos.

**Line commissioned, DoCo declared on 27.04.2018**

#### **4. 2x1500 MVA, 765/400 kV Parli (New) sub station**

- Substation partly commissioned on 27.04.2018, Balance commissioned in June'18.

**Transmission Project commissioned on June, 2018.**

## **(8) Transmission Project- Transmission System Strengthening associated with Vindhyachal- V**

### **Background**

NTPC Limited (NTPC) is augmenting 1x500MW unit at Vindhyachal generation project at Vindhyachal, Dist. Singrauli in the State of Madhya Pradesh. NTPC Limited has been granted LTA for 495.78 MW as per the LTA application and the details of drawl of power is given below:

|        |            |             |           |
|--------|------------|-------------|-----------|
| CSPDCL | 32.90 MW,  | MPTradeco   | 129.04 MW |
| GUVNL  | 110.34 MW, | MSEDCL      | 138.29 MW |
| Goa    | 5.47 MW,   | DNH         | 3.24 MW   |
| DD     | 2.09 MW,   | Unallocated | 74.41 MW  |

Transmission scheme was planned for the evacuation and supply of power from the Vindhyachal-V to the beneficiaries of the generation project. This transmission scheme shall facilitate supply of power to its beneficiaries with reliability and security. Beyond Jabalpur Pooling Station, dispersal of power to the beneficiaries of the generation project shall be through existing/planned transmission network under Inter-State Transmission System.

### **Scope of transmission project**

1. Vindhyachal Pooling Station-Jabalpur Pooling Station 765kV D/c Line

### **General Details**

|                                      |   |                                   |
|--------------------------------------|---|-----------------------------------|
| Special Purpose Vehicle (SPV)        | : | Powergrid Jabalpur Trans. Limited |
| Bid Process Coordinator (BPC)        | : | Rural Electrification Corporation |
| Levellised Tariff (Rs. Crs)          | : | 210.998                           |
| Request for Qualification            | : | 20.08.2014                        |
| Request for Proposal                 | : | 22.10.2014                        |
| Letter of Intent                     | : | 10.02.2015                        |
| Transmission Service Agreement (TSA) | : | 19.11.2014                        |
| SPV acquisition                      | : | 26.02.2015                        |
| Transmission License by CERC         | : | 15.06.2015                        |
| Tariff adoption by CERC              | : | 28.05.2015                        |
| Contract Performance Guarantee       | : | 25.02.2015                        |
| Clearance u/s 164                    | : | Sep' 16                           |
| Submission of execution plan to CEA  | : | July'15                           |
| NIT issued on                        | : | 26.06.2015                        |
| EPC contract awarded on              | : | 23.03.2016                        |
| Scheduled Date of Completion         | : | 26.06.2018                        |
| Anticipated Date of Completion       | : | Dec'18                            |

### **Status of progress of transmission project**

1. Vindhyachal Pooling Station - Jabalpur Pooling Station line 765 kV D/C line  
Awarded on M/s Tata & M/s. KEC on Mar'15.  
Length: 374.5 km  
Locations: 1010 nos

**Line commissioned in Dec'2018**

**Transmission Project commissioned in Dec' 2018.**

## **(9) Transmission Project- Strengthening of Transmission System beyond Vemagiri**

### **Background**

Presently Southern Region is facing severe power shortage. As per Operational data, the region faced Power deficit of about 8.4% (i.e. about 3270MW) during 2014-15 (Apr'14-Feb'15). This power deficit situation has arisen mainly due to (i) delay/deferment of anticipated generation projects and (ii) also due to non-availability of gas for existing gas projects in Southern Region. Presently the existing/planned system can facilitate import of about 9000 - 10000 MW into Southern Region. However under certain scenarios of non-availability / delay in commissioning of some of the generation projects in Southern region expected power transfer requirement is about 16000 MW by 2018-19. In view of large deficit and requirement of transmission system to meet future power transfer requirements, high capacity Inter-regional strengthening schemes were identified. The Present Scheme is part of the above identified scheme.

To facilitate import of power from North-East-West (NEW) grid to Southern Region grid, Angul – Srikakulam – Vemagiri corridor was envisaged and is under implementation. Under present proposed scheme, a 765kV D/c from Vemagiri to Cuddapah via Chilakaluripeta, wherein a 765/400kV Substation has been proposed, which would facilitate dispersal of power beyond Vemagiri. Further High capacity 400kV D/c have been proposed from Vemagiri, Chilakaluripeta and Cuddapah for Injection/ dispersal of power.

### **Scope of transmission project**

#### **Transmission Lines**

1. Vemagiri-II – Chilakaluripeta 765kV D/c line with 240 MVAR switchable line reactor at both ends.
2. Chilakaluripeta – Cuddapah 765kV D/c line with 240 MVAR switchable line reactor at both ends.
3. Chilakaluripeta – Narsaraopeta 400kV (quad) D/c line.
4. Cuddapah – Madhugiri 400kV (quad) D/c line with 80 MVAR switchable line reactor at both ends.
5. Srikaukulam Pooling Station – Garividi 400 kV (Quad) D/c line with 80 MVAR switchable line reactor at Garividi end.

#### **Substation**

1. Establishment of 765/400 kV substation at Chilakaluripeta with 7x500 MVA(one spare unit) transformers and 2x240 MVAR bus reactors each.  
765/400kV Transformers bays at Chilakaluripeta: 2 nos.  
765 kV  
Line bays : 4 nos., Spare bays : 6 nos.  
400 kV  
Line bays : 2 nos., Spare bays : 8 nos.
2. Satenapalli (Narasaraopeta) 400 kV Substation extension
3. Garividi 400 kV Substation extension

### **General Detail**

Special Purpose Vehicle (SPV) : Powergrid Southern Interconnector  
Transmission Limited (A subsidiary of PGCIL)

|                                      |   |                                   |
|--------------------------------------|---|-----------------------------------|
| Bid Process Coordinator (BPC)        | : | Rural Electrification Corporation |
| Levelling Tariff (Rs. Crs)           | : | 359.255                           |
| Request for Qualification            | : | 12.04.2015                        |
| Request for Proposal                 | : | 10.07.2015                        |
| Letter of Intent                     | : | 29.10.2015                        |
| Transmission Service Agreement (TSA) | : | 31.08.2015                        |
| SPV acquisition                      | : | 04.12.2015                        |
| Transmission License by CERC         | : | 14.03.2016                        |
| Tariff adoption by CERC              | : | 09.02.2016                        |
| Contract Performance Guarantee       | : | 26.11.2015                        |
| Clearance u/s 164                    |   | Received on 16.08.2017            |
| Execution plan submitted to CEA:     |   | Mar'16                            |
| NIT issued on                        | : | 18.12.2015                        |
| EPC awarded on                       | : | 19.03.2016                        |
| Scheduled Date of Completion         | : | 03.04.2019                        |
| Anticipated Date of Completion       | : | Apr'19                            |

### **Status of progress of transmission project**

#### **1. Vemagiri - Chilakaluripeta 765kV D/C Line**

Award placed in Mar'16 to M/s. KPTL

|                      |          |
|----------------------|----------|
| Length:              | 279 Kms  |
| Locations:           | 748 nos. |
| Foundation completed | 720 nos. |
| Towers erected       | 689 nos. |
| Stringing completed  | 239 km   |
| Scheduled COD        | Apr'19   |
| Anticipated COD      | Apr'19   |

### **Constraints where Project Authority requires intervention:**

- The Government of Andhra Pradesh issued G.O. dated 20.06.2017 fixing the compensation of 100% of tower base area and 10% of land value of Corridor. Notices under clause 11.5 of TSA and under clause 12.3 have been issued to all LTTC's for needful.
- POWERGRID met Principal Secretary (Energy) on 10.08.2018 and requested for expeditious clearance of ROW in A.P. Few locations cleared in Sitanagram after Administration support, however still around 28 locations (59 Tower Erection & 40Km Stringing) held up at Nandigram & recently work started in Sitanagaram at 7 locs.
- The matter is being highlighted to PMO level and the case sent for inclusion in PRAGATI meeting in Feb' 19. The case is listed in the agenda of next PRAGATI meeting.

### **Status of statutory approvals:**

**Forest** Nil

**Power line crossing**

|                        |   |    |      |                                                           |
|------------------------|---|----|------|-----------------------------------------------------------|
| Total no. of crossings | : | 27 | nos. |                                                           |
| Proposal submitted     | : | 27 | nos. | Date: 07.11.16 – 19.06.17<br>(Submitted on various dates) |
| Approval obtained      | : | 27 | nos. | Jun'17                                                    |

#### **Railway crossing**

|                        |   |   |      |                                                           |
|------------------------|---|---|------|-----------------------------------------------------------|
| Total no. of crossings | : | 3 | nos. |                                                           |
| Proposal submitted     | : | 3 | nos. | Date: 24.08.16 – 02.05.17<br>(Submitted on various dates) |
| Approval obtained      | : | 3 | nos. | Date: Jun'17, Oct'17(2 nos.)                              |

#### **National Highway Crossing**

|                        |   |   |      |                              |
|------------------------|---|---|------|------------------------------|
| Total no. of crossings | : | 3 | nos. |                              |
| Proposal submitted     | : | 3 | nos. | Date: 10.05.17               |
| Approval obtained      | : | 3 | nos. | Date: Jun'17, Oct'17 (2 nos) |

#### **River Crossings**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 3 | nos. |
| Proposal submitted     | : | 3 | nos. |
| Approval obtained      | : | 3 | nos. |

#### **PTCC approval**

Proposal submitted to Defence on 27.07.17  
 Proposal submitted to BSNL on 27.07.17  
 Proposal submitted to Railways on 27.07.17

#### **Current status:**

Proposal received at PTCC, New Delhi, final clearance awaited

#### **Defence/Civil Aviation**

Proposal submitted to Defence on 17.06.17.  
 Proposal submitted to Civil Aviation on 16.06.17.

#### **Current Status:**

Civil aviation NOC received, defence NOC awaited.

## **2. Chilakaluripeta - Cudappah 765kV D/C Line**

Award placed in Mar'16 to M/s. KEC,

|                      |   |          |
|----------------------|---|----------|
| Length               | : | 288Km    |
| Locations            | : | 768 nos. |
| Foundation completed | : | 768 nos. |
| Towers erected       | : | 768 nos. |
| Stringing            | : | 288 km   |
| Scheduled COD        | : | Apr'19   |
| Anticipated COD      | : | Apr'19   |

- **Work on the line completed.**

**Constraints where Project Authority requires intervention: NIL**

**Status of statutory approvals:**

**Forest**

Details of Tr. Line Falling under Forest:- Locations: 28 nos. Length: 11.40km

Forest area affected (ha) : 74.846

Forest proposals submitted on 31.05.17

**Current status:**

**Forest proposal**

Stage – I clearance received on 05.04.2018.

Forest compensation paid, Working permission accorded.

**Wild Life proposal:**

NBWL meeting held on 07.09.2018 and proposal recommended. Copies of minutes submitted to RoMOEF, Chennai for issue of Stage-1. Demand note received. Working permission received on 16.11.18.

**Power line crossing**

|                        |   |    |      |                                                         |
|------------------------|---|----|------|---------------------------------------------------------|
| Total no. of crossings | : | 17 | nos. |                                                         |
| Proposal submitted     | : | 17 | nos. | Date:24.0816 - 02.04.17<br>(Submitted on various dates) |
| Approval obtained      | : | 17 | nos. | Date: Jun'17                                            |

**Railway crossing**

|                        |   |   |      |                                   |
|------------------------|---|---|------|-----------------------------------|
| Total no. of crossings | : | 3 | nos. |                                   |
| Proposal submitted     | : | 3 | nos. | Date: 28.01.17, 25.04.17,02.05.17 |
| Approval obtained      | : | 3 | nos. |                                   |

**National Highway Crossing**

|                        |   |   |      |                                  |
|------------------------|---|---|------|----------------------------------|
| Total no. of crossings | : | 4 | nos. |                                  |
| Proposal submitted     | : | 4 | nos. | Date:03.11.16,24.08.16, 25.04.17 |
| Approval obtained      | : | 4 | nos. | Date: Jun'17                     |

**River Crossings**

|                        |   |     |  |  |
|------------------------|---|-----|--|--|
| Total no. of crossings | : | NIL |  |  |
|------------------------|---|-----|--|--|

**PTCC approval**

Proposal submitted to Defence on 26.07.2017

Proposal submitted to BSNL on 26.07.2017, being submitted to DE, PTCC for Ongole, Nellore and Kadapa divisions.

Proposal submitted to Railways on 26.07.2017.

**Current status:**

CEA cleared the proposal & sent to DE, PTCC, Chennai.

**Defence/Civil Aviation**

Proposal submitted to Defence on 20.09.2017

**Current Status:** Civil Aviation Clearance received with Height restrictions on 13 no. Tower locations.

### **3. Cudappah - Madhugiri 400 kV D/C (Quad Moose) Line**

Award placed in Mar'16 to M/s. L&T,

Length: 243 Km

Locations: 650 nos.

- **Line commissioned on 26.02.19**

### **4. Srikakulam - Garividi 400 kV (Quad Moose) D/C Line**

Length: 144Km

Locations: 393 nos.

- **Line commissioned on 04.08.18 & put under commercial operation w.e.f. 06.08.18**

### **5. Chilkaluripeta - Narasaraopeta 400 kV (Quad Moose) D/C Line**

Length: 30 Km

Locations: 81 nos.

- **Line Test charged on 29.03.2019**

### **6. 765/400kV Chilakularipeta Substation**

Awarded to M/s GE T&D INDIA LTD

Land acquired : 100%

Civil work completed : 99%

Equipment supplied : 100%

Equipment erection : 100%

Scheduled COD : Apr'19

Anticipated COD : Apr'19

CEA Inspection completed for 400 kV portion in August 2018. NOC received on 15.10.18. **CEA inspection completed for 765 kV portion on 04.01.19.**

- **Test charged on 29th Mar'19. Commissioning under progress.**

### **7. Satenapalli (Narasaraopeta) 400 kV Substation extension**

Awarded to M/s GE T&D INDIA LTD

Land acquired : 100%

Civil work completed : 100%

Equipment supplied : 100%

Equipment erection : 100%

Scheduled COD : Apr'19

Anticipated COD : Apr'19

- CEA Inspection completed in August 2018. NOC received on 15.10.18.
- **Test charged on 29.03.2019.**

## **8. Garividi 400 kV Substation extension**

- **S/s commissioned & under commercial operation w.e.f. 06.08.2018.**

## **(10) Name of transmission project- Eastern Region Strengthening Scheme-XVIII (ERSS-XVIII)**

### **Background**

The major generation projects in ER in future are envisaged in the central and western part of the region (Odisha, Jharkhand and Bihar); however, no major generation addition is expected in the eastern part (West Bengal). Thus, in order to provide reliable and secure power supply within the region from various future generation sources and also to facilitate power exchange with the neighbouring regions under various operating conditions, it was felt necessary to build a strong transmission network interconnecting eastern and western part of ER.

Accordingly, implementation of high capacity Ranchi – Medinipur – Jeerat 765kV D/c line along with establishment of 765/400kV substations at Medinipur and Jeerat, was approved in the 17th Standing Committee Meeting on Power System Planning of ER to provide a strong East – West connection in the Eastern Region as well as to feed large load centres of West Bengal viz. Jeerat and Subhashgram area. For further dispersal of power from these 765/400kV sub-stations, various 400kV lines have been planned

### **Scope of transmission project**

#### **Transmission Lines**

- Ranchi (New) – Medinipur 765kV D/c line with Hexa ACSR Zebra conductor along with 765kV, 240 MVAR switchable line reactor with 750Ω NGR in each circuit at Medinipur end (total: 765kV, 7x80 MVAR single phase units, 1 unit as spare).
- Medinipur - Jeerat (New) 765kV D/c line with Hexa ACSR Zebra conductor along with 765kV, 240 MVAR switchable line reactor with 600 Ω NGR in each circuit at Jeerat (New) end (total: 765kV, 7x80 MVAR single phase units, 1 unit as spare).
- LILO of both circuits of Chandithala – Kharagpur 400kV D/c line at Medinipur.
- Jeerat (New) – Subhasgram 400kV D/c line (ACSR Quad Moose)
- Jeerat (New) – Jeerat (WBSETCL) 400kV D/c line (ACSR Quad Moose)
- LILO of Jeerat (WBSETCL) – Subhasgram (PG) 400kV S/c section at Rajarhat (POWERGRID)

#### **Substation**

**(13) Establishment of 765/400kV, 2×1500MVA substation at Medinipur**

#### **765kV**

- ICTs: 7×500 MVA, 765/400kV (1 spare unit)
- ICT bays: 2 no.
- Line bays: 4 no.
- Bus reactor: 7×110 MVAR single phase units including one (1) spare unit
- Bus reactor bay: 2 no.
- Space for future line bays (along with space for switchable line reactor): 4 no.
- Space for future ICT bays: 2 no.
- Space for future 765/400 kV ICT: (6x500MVA single phase units)

#### **400kV**

- ICT bays: 2 no.
- Line bays: 4 no.

- Bus reactor: 2×125 MVAR
- Bus reactor bay: 2 no.
- Space for future line bays (along with space for switchable line reactor): 6 no.
- Space for future ICT bays: 2 no.

**(14) Establishment of 765/400kV, 2x1500MVA substations at Jeerat (New)**  
**765kV**

- ICTs: 7×500MVA, 765/400kV (1 spare unit)
- ICT bays: 2 no.
- Line bays: 2 no.
- Bus reactor: 7×110 MVAR single phase unit including one (1) spare unit
- Bus reactor bay: 2 no.
- Space for future line bays (along with space for switchable line reactor): 4 no.
- Space for future ICT bays: 2 no.
- Space for future 765/400 kV ICT: (6x500MVA single phase units)

**400kV**

- ICT bays: 2 no.
- Line bays: 4 no.
- Bus reactor: 2×125 MVAR
- Bus reactor bay: 2 no.
- Space for future line bays (along with space for switchable line reactor): 4 no.
- Space for future ICT bays: 2 no.

2 no. 400kV GIS line bays at Jeerat (WBSETCL)

**General Detail**

|                                      |   |                                                                             |
|--------------------------------------|---|-----------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : | Powergrid Medinipur-Jeerat Transmission Limited (A subsidiary of POWERGRID) |
| Bid Process Coordinator (BPC)        | : | Power Finance Corporation                                                   |
| Levellised Tariff (Rs. Crs)          | : | 498.652                                                                     |
| Request for Qualification            | : | 14-Jun-2016                                                                 |
| Request for Proposal                 | : | 06-Oct-2016                                                                 |
| Letter of Intent                     | : | 21-Feb-2017                                                                 |
| Transmission Service Agreement (TSA) | : | 17-Nov-2016                                                                 |
| SPV acquisition                      | : | 28-Mar-2017                                                                 |
| Transmission License by CERC         | : | 20-June-2017                                                                |
| Tariff adoption by CERC              | : | 12-June-2017                                                                |
| Contract Performance Guarantee       | : | 28-Mar-2017                                                                 |
| Clearance u/s 164                    | : | 15-Feb-2018                                                                 |
| Execution plan submitted to CEA:     | : | 2-June-2017                                                                 |
| NIT issued on                        | : | 02-Nov-2016                                                                 |
| EPC awarded on                       | : | 31-Mar-2017                                                                 |
| Scheduled Date of Completion         | : | 28-Jul-2020                                                                 |
| Anticipated Date of Completion       | : | 28-Jul-2020                                                                 |

**Status of progress of transmission project**

**1. Ranchi – Medinipur 765kV D/C line**

Procurement activities initiated

Award placed on 31.03.2017 to M/s. L&T.

- Length : 268 Km
- Locations : 716 nos.
- Foundation completed : 654 nos.
- Towers erected : 617 nos.
- Stringing : 104.5 Km
- Scheduled COD July' 2020
- Anticipated COD July' 2020

### **Status of statutory approvals: Survey under Progress**

#### **Forest:**

Details of Tr. Line Falling under Forest:-

Length: 10.40 kms

Forest area affected (ha) : 69.7

Forest proposals submitted on :

ER-I portion: - 6.45 Km (43.26 ha.). Proposal submitted on 12.04.2018.

ER-II portion: - 3.95 km (26.526ha.). Revised proposal has been submitted on 30.06.2018. It was further found that there is an involvement of 2.66 km(17.87 Ha) forest land only & accordingly the compliance statement had been prepared and submitted to forest department on 25.08.18. **Stage-I approval obtained on 16.01.19.**

#### **Power line crossing (66kV and above)**

|                        |   |    |                                                                      |
|------------------------|---|----|----------------------------------------------------------------------|
| Total no. of crossings | : | 14 | nos.                                                                 |
| Proposal submitted     | : | 07 | nos. Date: 26.03.18                                                  |
|                        |   | 06 | nos. Date: 23.04.18                                                  |
|                        |   | 01 | no. Date: 10.07.18                                                   |
| Approval obtained      | : | 14 | nos. [7 nos(WB) on 19/6, 21/8, 27/7, 29/8,8/5/18 & 2 nos. on 9/8/18] |

#### **Railway crossing**

|                        |   |    |                                    |
|------------------------|---|----|------------------------------------|
| Total no. of crossings | : | 04 | nos. + 01 No. (Proposed line)      |
| Proposal submitted     | : | 01 | no. Date: 16.03.18                 |
|                        |   | 02 | no. Date: 26.03.18                 |
|                        |   | 01 | no. Date: 22.06.18                 |
| Approval obtained      | : | 04 | nos. 29/09/18, 5/11/18 & 31/12/18. |

#### **National Highway Crossing**

|                        |   |    |                             |
|------------------------|---|----|-----------------------------|
| Total no. of crossings | : | 05 | nos.                        |
| Proposal submitted     | : | 01 | no. Date: 15.03.18          |
|                        |   | 02 | nos. Date: 26.03.18         |
|                        |   | 01 | no. Date: 21.06.18          |
|                        |   | 01 | no. Date: 23.07.18          |
| Approval obtained      | : | 05 | no. 06/08, 06/09 & 16/11/18 |

#### **River Crossings**

NIL

|               |   |                                             |
|---------------|---|---------------------------------------------|
| PTCC approval | : | 09.05.18 Online submission for Jharkhand    |
|               |   | 26.05.18 Online submission for West Bengal. |

|                        |   |                                            |
|------------------------|---|--------------------------------------------|
| Defence/Civil Aviation | : | Online proposal submitted for Jharkhand.   |
|                        |   | Online proposal submitted for West Bengal. |

## 2. Medinipur - Jeerat (New) 765kV D/C line

Award placed on 31.03.2017 to M/s. L&T. Survey under progress

Length: :169Km  
Locations: : 461 nos.  
Foundation completed : 319 nos.  
Towers erected : 257 nos.  
Stringing completed : 21 Km  
Scheduled COD :July' 2020  
Anticipated COD :July' 2020

### **Constarints where Project Authority requires intervention:**

**Status of statutory approvals: Survey under Progress**

**Forest: Nil**

### **Power line crossing (66kV and above)**

|                        |   |    |      |                |
|------------------------|---|----|------|----------------|
| Total no. of crossings | : | 17 | nos. |                |
| Proposal submitted     | : | 10 | nos. | Date: 26.03.18 |
|                        |   | 03 | nos. | Date: 13.04.18 |
|                        |   | 01 | nos. | Date: 24.04.18 |
|                        |   | 01 | nos. | Date: 12.05.18 |
|                        |   | 01 | nos. | Date: 14.09.18 |

Approval obtained : 17 nos. Approval obtained in Jun-Nov'18

### **Railway crossing**

|                        |   |     |                                 |                           |
|------------------------|---|-----|---------------------------------|---------------------------|
| Total no. of crossings | : | 05  | nos.                            |                           |
| Proposal submitted     | : | 05  | nos.                            | Date: 26.03.18 & 27.03.18 |
| Approval obtained      | : | NIL | (Joint Inspection done for all) |                           |

### **National Highway Crossing**

|                        |   |    |      |                           |
|------------------------|---|----|------|---------------------------|
| Total no. of crossings | : | 02 | nos. |                           |
| Proposal submitted     | : | 01 | nos. | Date: 26.03.18            |
|                        |   | 01 | nos. | Date: 25.05.18            |
| Approval obtained      | : | 02 | nos. | Date: 07/12/18 & 04/01/19 |

**River Crossings** : 01 No. Proposal to be submitted on 22/01/19.

**PTCC approval** : Proposal submitted on 02.06.18.

**Defence/Civil Aviation** : Online Proposal submitted.

## 3. Jeerat (New) – Subhasgram 400kV D/C line

Procurement activities initiated

Award placed on 31.03.2017 to M/s. L&T. Survey under progress

- Length: 107 Km
- Locations: 304 nos.
- Foundation 44 nos .
- Tower erection 16 nos.
- Stringing NIL

|                 |            |
|-----------------|------------|
| Scheduled COD   | July' 2020 |
| Anticipated COD | July' 2020 |

### **Constraints where Project Authority requires intervention:**

Severe RoW being faced. Administration support required for clearance of fronts

Status of statutory approvals: Survey under Progress

**Forest: Nil**

#### **Power line crossing (66kV and above)**

|                        |   |    |                                        |
|------------------------|---|----|----------------------------------------|
| Total no. of crossings | : | 09 | nos.                                   |
| Proposal submitted     | : | 06 | nos. Date: 3 nos. each in Jul & Nov'18 |
| Approval obtained      | : | 04 | nos. Date: 3 nos each in Sep & Nov'18  |

#### **Railway crossing**

|                        |   |                            |      |
|------------------------|---|----------------------------|------|
| Total no. of crossings | : | 03                         | nos. |
| Proposal submitted     | : | Proposal under submission. |      |
| Approval obtained      | : | NIL                        |      |

#### **National Highway Crossing**

|                        |   |                            |      |
|------------------------|---|----------------------------|------|
| Total no. of crossings | : | 01                         | nos. |
| Proposal submitted     | : | Proposal under submission. |      |
| Approval obtained      | : | NIL                        |      |

#### **River Crossings**

NIL

|                               |   |                           |
|-------------------------------|---|---------------------------|
| <b>PTCC approval</b>          | : | Proposal to be submitted. |
| <b>Defence/Civil Aviation</b> | : | Proposal to be submitted. |

### **4. Jeerat (New) – Jeerat (WBSETCL) 400kV D/C line**

Award placed on 31.03.2017 to M/s. L&T

- Length : 25 Km
- Locations : 81 nos.
- Foundation completed : 53 nos.
- Tower Erection : 38 nos.
- Stringing : 4 Km
- Scheduled COD : July' 2020
- Anticipated COD : July' 2020

Status of statutory approvals: Survey under Progress

**Forest: Nil**

#### **Power line crossing (66kV and above)**

|                        |   |    |                     |
|------------------------|---|----|---------------------|
| Total no. of crossings | : | 07 | nos.                |
| Proposal submitted     | : | 02 | nos. Date: 06.04.18 |
|                        |   | 01 | nos. Date: 13.04.18 |
|                        |   | 01 | nos. Date: 26.05.18 |
| Approval obtained      | : | 04 | nos. Date: Jul'18   |

|    |      |              |
|----|------|--------------|
| 01 | nos. | Date: Aug'18 |
| 02 | nos. | Date: Dec'18 |

#### **Railway crossing**

|                        |   |     |
|------------------------|---|-----|
| Total no. of crossings | : | NIL |
| Proposal submitted     | : | NIL |
| Approval obtained      | : | NIL |

#### **National Highway Crossing**

|                        |   |     |
|------------------------|---|-----|
| Total no. of crossings | : | NIL |
| Proposal submitted     | : | NIL |
| Approval obtained      | : | NIL |

**River Crossings** NIL

|                               |   |                                 |
|-------------------------------|---|---------------------------------|
| <b>PTCC approval</b>          | : | Proposal submitted on 02.06.18. |
| <b>Defence/Civil Aviation</b> | : | Proposal to be submitted.       |

### **5. LILO of Jeerat (WBSETCL) – Subhasgram (PG) 400kV at Rajarhat**

Award placed on 31.03.2017 to M/s. L&T.

|                 |             |
|-----------------|-------------|
| Length:         | :12 Km      |
| Locations:      | :37 nos.    |
| Scheduled COD   | :July' 2020 |
| Anticipated COD | :July' 2020 |

**Status: Scope deleted vide CEA letter dated 04.04.18.**

### **6. LILO of both circuits of Chandithala – Kharagpur 400kV D/C line at Medinipur**

Award placed on 31.03.2017 to M/s. L&T

|                        |   |            |
|------------------------|---|------------|
| • Length               | : | 73 Km      |
| • Locations            | : | 199 Nos.   |
| • Foundation completed | : | 152 Nos.   |
| • Towers erected       | : | 132 Nos.   |
| • Stringing            | : | 29.5 Km    |
| Scheduled COD          | : | July' 2020 |
| Anticipated COD        | : | July' 2020 |

Status: Foundation work & Tower Erection work under progress.

**Status of statutory approvals: Survey under Progress**

Forest: 0.108 Km (0.497 ha.). The proposal had been submitted on 02.07.2018.

**Stage-I approval obtained on 16.01.19**

#### **Power line crossing (66kV and above)**

|                        |   |    |                     |
|------------------------|---|----|---------------------|
| Total no. of crossings | : | 02 | nos.                |
| Proposal submitted     | : | 02 | nos. Date: 19.03.18 |

Approval obtained : 02 Nos. Date: 18/05, 3/8/18

**Railway crossing**

Total no. of crossings : NIL  
Proposal submitted : NIL  
Approval obtained : NIL

**National Highway Crossing**

Total no. of crossings : NIL  
Proposal submitted : NIL  
Approval obtained : NIL

**River Crossings** NIL

**PTCC approval** : Proposal submitted on 02.06.18. Approved.

**Defence/Civil Aviation** : Online Proposal submitted on 11/09/18.

**7. 2x1500 MVA , 765/400 kV Substation at Medinipur**

Award placed on 29.09.2017 to M/s BHEL.

Land acquired : 100%  
Civil work completed : 30 %  
Equipment supplied : 40 %  
Equipment erection : 0 %  
Scheduled COD : July' 2020  
Anticipated COD : July' 2020

**Constarints where Project Authority requires intervention:** Substation work being stopped due to local agitation since Oct'18. Matter resolved with the help of local/ state administration

**8. 2x1500 MVA , 765/400 kV Substation at Jeerat (New)**

Award placed on 29.09.2017 to M/s BHEL. Work under progress.

Land acquired : 100%  
Civil work completed : 7 %  
Equipment supplied : 7 %  
Equipment erection : 0 %  
Scheduled COD : July' 2020  
Anticipated COD : July' 2020

**Current Status:** Substation work stopped on 30.10.18 due to some local agitation. Work resumed on 05.11.18 with the help of local administration,

**9. Extension of 400 kV Substation at Jeerat (WBSETCL)**

Work being executed by WBSETCL.

Land acquired : 100%  
Civil work completed : 5%

|                    |   |            |
|--------------------|---|------------|
| Equipment supplied | : | 0 %        |
| Equipment erection | : | 0%         |
| Scheduled COD      | : | July' 2020 |
| Anticipated COD    | : | July' 2020 |

**Constraints if any:**

- Severe RoW anticipated in most of Transmission lines.

## **(11) Name of transmission project - Eastern Region Strengthening Scheme(ERSS) XXI**

### **Background**

Demand of Bihar has touched 3717MW under unrestricted condition in FY 2016-17 and may go up to 8774MW by 2018-19 due to segregation of agricultural feeders. The demand is expected to reach about 11000 MW by the end of 13th plan (FY 2021-22). For meeting this demand, ISTS network including two (3) 400kV sub-stations at Sitamarhi, Saharsa and Chandauti (Gaya) (Total transformation capacity of 4900 MVA) along with augmentation of 400/132kV Motihari S/s and associated 400kV transmission lines (about 500 ckm) have been planned.

### **Scope of transmission project**

#### **Transmission Lines**

1. Darbhanga – Sitamarhi (New) 400kV D/c line with Triple Snowbird conductor
2. Sitamarhi (New) – Motihari 400kV D/c line with Triple Snowbird conductor
3. LILO of both circuits of Nabinagar-II – Gaya 400kV D/c (Quad Moose) line of PGCIL at Chandauti (New)
4. LILO of Kishanganj – Patna 400kV D/c (Quad Moose) line of PGCIL at Saharsa (New)

#### **Substation**

1. Establishment of 400/220/132 kV, 2x500 MVA + 2x200 MVA S/s at Sitamarhi (New)

#### **400 kV**

- ICTs: 400/220 kV, 2x500 MVA
- ICTs bays: 2 no.
- Line bays with space for switchable line reactor: 4 no.  
[2 no. for Darbhanga – Sitamarhi (New) 400kV D/c line with Triple Snowbird conductor and 2 no. for Sitamarhi (New) – Motihari 400kV D/c line with Triple Snowbird conductor]
- Bus reactor: 420kV, 2x125 MVAR
- Bus reactor bay: 2 no.
- Space for future line bays (including space for switchable line reactor): 6 no.
- Space for future ICT bays: 2 no.

#### **220 kV**

- ICTs: 220/132 kV, 2x200 MVA
- ICTs bays: 4 no.
- Line bays: 4 no.  
[2 no. for Sitamarhi (New) – Motipur (BSPTCL) and 2 no. for Sitamarhi (New) – Motihari (New of BSPTCL) 220kV D/c lines]
- Space for future line bays: 4 no.
- Space for future ICT bays: 4 no.

### **132 kV**

- ICTs bays: 2 no.
- Line bays: 4 no.  
[2 no. for Sitamarhi (New) – Sitamarhi 132kV D/c (Single Moose) line and 2 no. for Sitamarhi (New) – Pupri 132kV D/c line]
- Space for future line bays: 4 no.
- Space for future ICT bays: 2 no.
- Space for future 400/220 kV, 2x500 MVA ICTs

Space for future 220/132 kV, 2x200 MVA ICTs

## **2. Establishment of 400/220/132 kV, 3x500 MVA + 3x200 MVA S/s at Chandauti (New)**

### **400 kV**

- ICTs: 400/220 kV, 3x500 MVA
- ICTs bays: 3 no.
- Line bays with space for switchable line reactor: 4 no.  
[4 no. for LILO of both circuits of Nabinagar-II – Gaya 400kV D/c (Quad Moose) line of PGCIL at Chandauti (New)]
- Bus reactor: 420kV, 2x125 MVAR
- Bus reactor bay: 2 no.
- Space for future line bays (including space for switchable line reactor): 6 no.
- Space for future ICT bays: 2 no.

### **220 kV**

- ICTs: 220/132 kV, 3x200 MVA
- ICTs bays: 6 no.
- Line bays: 4 no.  
[4 no. for LILO of Gaya (PGCIL) – Sonenagar 220kV D/c at Chandauti (New). Gaya (PGCIL) – Sonenagar shall be LILOed at Bodhgaya (BSPTCL) also, so as to form Gaya (PGCIL) – Bodhgaya (BSPTCL) – Chandauti (New) – Sonenagar 220kV D/c line]
- Space for future line bays: 4 no.
- Space for future ICT bays: 4 no.

### **132 kV**

- ICTs bays: 3 no.
- Line bays: 4 no.  
[2 no. for LILO of Chandauti (BSPTCL) – Rafiganj and 2 no. for LILO of Chandauti (BSPTCL) – Sonenagar 132kV S/c (HTLS conductor of 240MVA, ampacity - 1050A) lines at Chandauti (New)]
- Space for future line bays: 4 no.
- Space for future ICT bays: 2 no.
- Space for future 400/220 kV, 2x500 MVA ICTs

Space for future 220/132 kV, 2x200 MVA ICTs

## **3. Establishment of 400/220/132 kV, 2x500 MVA + 2x200 MVA S/s at Saharsa (New)**

### **400 kV**

- ICTs: 400/220 kV, 2x500 MVA
- ICTs bays: 2 no.
- Line bays with space for switchable line reactor: 4 no.  
[4 no. for LILO of Kishanganj – Patna 400kV D/c (Quad Moose) line of PGCIL at Saharsa (New)]

- Bus reactor: 420kV, 2x125 MVAR
- Bus reactor bay: 2 no.
- Space for future line bays (including space for switchable line reactor): 6 no.

Space for future ICT bays: 2 no.

#### **220 kV**

- ICTs: 220/132 kV, 2x200 MVA
- ICTs bays: 4 no.
- Line bays: 4 no.  
[2 no. for Saharsa (New) – Begusarai and 2 no. for Saharsa (New) – Khagaria (New) 220kV D/c lines]
- Space for future line bays: 4 no.
- Space for future ICT bays: 4 no.

#### **132 kV**

- ICTs bays: 2 no.
- Line bays: 2 no.  
[2 no. for Saharsa (New) – Saharsa 132kV D/c line]
- Space for future line bays: 6 no.
- Space for future ICT bays: 2 no.
- Space for future 400/220 kV, 2x500 MVA ICTs

Space for future 220/132 kV, 2x200 MVA ICTs

#### **4. Substation extension at Darbhanga S/s**

- 400kV Line bays with space for switchable line reactor: 2 no.

[2 no. for Darbhanga – Sitamarhi (New) 400kV D/c line with Triple Snowbird conductor]

#### **5. Substation extension at Motihari S/s**

##### **400kV**

- ICTs: 400/132kV, 315MVA (3rd)
- ICT bays: 1 no.
- Line bays with space for switchable line reactor: 2 no.[2 no. for Sitamarhi (New) – Motihari 400kV D/c line with Triple Snowbird conductor]

##### **132kV**

ICT bays: 1 no.

#### **General Detail**

|                                      |   |                               |
|--------------------------------------|---|-------------------------------|
| Special Purpose Vehicle (SPV)        | : | ERSS XXI Transmission Limited |
| Bid Process Coordinator (BPC)        | : | REC TPCL                      |
| Estimated Cost(Rs in crs)            | : | Rs.1321 Cr                    |
| Levellised Tariff (Rs. Crs)          | : | Rs.138.586 Cr                 |
| Request for Qualification            | : | 28.12.2016                    |
| Request for Proposal                 | : | 11.08.2017                    |
| Letter of Intent                     | : | 27.09.2017                    |
| Transmission Service Agreement (TSA) | : | 22.12.2017                    |
| SPV acquisition                      | : | 12.01.2018                    |
| Transmission License by CERC         | : | Application on 16.01.2018     |
| Tariff adoption by CERC              | : | Application on 16.01.2018     |

|                                |   |                                   |
|--------------------------------|---|-----------------------------------|
| Contract Performance Guarantee | : | Submitted on 11.01.2018           |
| Clearance u/s 164              | : | Application submitted on 04.04.19 |
| Execution plan submitted to    | : | 29.01.2018                        |
| EPC awarded on                 | : | 24.01.2018                        |
| Scheduled Date of Completion   | : | 12.03.2021                        |
| Anticipated Date of Completion | : | 12.03.2021                        |

## Status of progress of transmission project

### 1. Darbhanga – Sitamarhi (New) 400kV D/C line

Procurement activities initiated

Award placed on 24.01.2018 to M/s. TATA. Survey completed.

- Length: 80.5Km
- Locations: 215 Nos.
- Foundation completed: 96 Nos.
- Tower Erected: 68 Nos.
- Stringing 6.5 km
- Scheduled COD Mar'21
- Anticipated COD Mar'21

#### Power line crossing

|                        |   |     |                 |
|------------------------|---|-----|-----------------|
| Total no. of crossings | : | 07  | Nos.            |
| Proposal submitted     | : | 02  | Nos. 30.09.2018 |
| Approval obtained      | : | NIL |                 |

#### Railway crossing

|                        |   |     |                       |
|------------------------|---|-----|-----------------------|
| Total no. of crossings | : | 02  | Nos.                  |
| Proposal submitted     | : | 02  | Nos. Date: 04.01.2019 |
| Approval obtained      | : | NIL |                       |

#### National Highway Crossing

|                        |   |     |                 |
|------------------------|---|-----|-----------------|
| Total no. of crossings | : | 03  | Nos.            |
| Proposal submitted     | : | 03  | Nos. 30.09.2018 |
| Approval obtained      | : | NIL |                 |

**Forest:** 1.02 ha (2 divisions i.e; DBG, SMH)

Prosposal submitted on 15.10.2018. . Application forwarded by nodal officer to respective DFO.

**PTCC approval:** Submitted on 04.01.2019. Approval awaited

### 2. Sitamarhi (New) – Motihari 400kV D/C line

Award placed on 24.01.2018 to M/s. TATA.

- Length: 85.3 Km
- Locations: 229 Nos.
- Foundation completed: 101 Nos.
- Tower Erected: 68 Nos.

- Stringing 7 Km
- Scheduled COD : Mar'21
- Anticipated COD : Mar'21

#### **Power line crossing**

Total no. of crossings : 03 Nos.  
 Proposal submitted : 03 [ 2 Nos. on 30.09.2018 & 1 No. on 24.12.2018 ]  
 Approval obtained : NIL

#### **Railway crossing**

Total no. of crossings : 02 Nos.  
 Proposal submitted : 02 No. Date: 04.01.2019  
 Approval obtained : NIL

#### **National Highway Crossing**

Total no. of crossings : 05 Nos.  
 Proposal submitted : 05 Nos. 05.10.2018  
 Approval obtained : NIL

**Forest:** 2.0 ha (3 divisions i.e; E. Chap, Sheohar, SMH))  
 Prosal submitted on 16.10.2018. Expected stage-I approval by Apr'19

**PTCC approval:** Being prepared

### **3. LILO of both circuits of Nabinagar-II – Gaya 400KV D/c (Quad Moose) line of PGCIL at Chandauti (New)**

Award placed on 24.01.2018 to M/s. TATA.

Length: 2.2 Km  
 Locations: 12 Nos.  
 Foundation completed  
 Towers erected  
 Stringing  
 Scheduled COD Mar'21  
 Anticipated COD Mar'21

**Crossing :NIL**

**Forest: NIL**

**PTCC approval:** Being Prepared.

### **4. LILO of Kishanganj – Patna 400KV D/c (Quad Moose) line of PGCIL at Saharsa (New)**

Award placed on 24.01.2018 to M/s. TATA.

- Length: 75 Km
- Locations: 205 Nos.
- Foundation completed: 43 Nos.
- Tower Erected: 5 nos.
- Stringing Nil
- Scheduled COD Mar'21
- Anticipated COD Mar'21

#### **Power line crossing**

Total no. of crossings : 8 nos.  
 Proposal submitted : 8 nos. Date: 26.03.2019  
 Approval obtained : NIL

#### **Railway crossing**

Total no. of crossings : 2 nos.  
 Proposal submitted : 2 nos. Date: 12.03.2019  
 Approval obtained : NIL

#### **National Highway Crossing**

Total no. of crossings : 6 nos.  
 Proposal submitted : 2 nos. Date: 26.03.2019  
 Approval obtained : NIL

**Forest: 2.38 Ha in Saharsa.** Proposal submitted on 03.03.2019.

**PTCC:** Being prepared.

#### **5. Establishment of 400/220/132 kV, 2x500 MVA + 2x200 MVA S/s at Sitamarhi (New)**

Awarded on 27.02.2018 to M/s KEC. Engg. Under progress.

Land acquired : 90 %  
 Civil work completed : 1 %  
 Equipment supplied : 0 %  
 Equipment erection : 0 %  
 Scheduled COD : Mar'21  
 Anticipated COD : Mar'21

#### **6. Establishment of 400/220/132 kV, 3x500 MVA + 3x200 MVA S/s at Chandauti (New)**

Awarded on 20.03.2018 to M/s ABB. Engg. Under progress.

Land acquired : 100 %  
 Civil work completed : 11 %  
 Equipment supplied : 3 %

|                    |   |         |
|--------------------|---|---------|
| Equipment erection | : | 0 %     |
| Scheduled COD      | : | Mar' 21 |
| Anticipated COD    | : | Mar' 21 |

#### **7. Establishment of 400/220/132 kV, 2x500 MVA + 2x200 MVA S/s at Saharsa (New)**

Awarded on 20.03.2018. Engg. Under progress.

|                      |   |         |
|----------------------|---|---------|
| Land acquired        | : | 89 %    |
| Civil work completed | : | 2 %     |
| Equipment supplied   | : | 0 %     |
| Equipment erection   | : | 0 %     |
| Scheduled COD        | : | Mar' 21 |
| Anticipated COD      | : | Mar' 21 |

#### **8. Substation extension at Darbhanga S/s**

Awarded on 27.02.2018 to M/s KEC. Engg. Under progress.

- Land acquired :
- Civil work completed : 3 %
- Equipment supplied : 0 %
- Equipment erection : 0 %
- Scheduled COD : Mar'21
- Anticipated COD : Mar'21

A meeting was held in CEA on the issue of finalization of layout of 400 kV bays with DMTCL. During the meeting it was decided that ERSS XXI Transmission Limited & DMTCL will visit the site and find a amicable solution considering space for 220 kV future bays.

#### **9. Substation extension at Motihari S/s**

Awarded on 27.02.2018 to M/s KEC. Engg. Under progress.

|                      |   |      |
|----------------------|---|------|
| Civil work completed | : | 10 % |
| Equipment supplied   | : | 0 %  |
| Equipment erection   | : | 0 %  |

|                 |   |        |
|-----------------|---|--------|
| Scheduled COD   | : | Mar'21 |
| Anticipated COD | : | Mar'21 |

## **(12) Name of transmission project - New WR-NR 765 kV Inter-Regional Corridor**

### **Background**

To enhance the power transfer capability between Western and Northern Regions, the following WR - NR Inter-regional corridor has been approved.

The corridor shall provide strong connectivity between NR and WR grids and facilitate reliable flow of power from various generation projects in WR to load centers in NR.

### **Scope of transmission project**

765 kV Vindhyanchal Pooling Station- Varanasi D/C line

### **General Detail**

|                                      |   |                                  |
|--------------------------------------|---|----------------------------------|
| Special Purpose Vehicle (SPV)        | : | WR-NR Power Transmission Limited |
| Bid Process Coordinator (BPC)        | : | REC TPCL                         |
| Estimated Cost (Rs in crs)           | : | Rs.916 Cr                        |
| Levellised Tariff (Rs. Crs)          | : | Rs.92.733 Cr                     |
| Request for Qualification            | : | 19.12.2016                       |
| Request for Proposal                 | : | 22.09.2017                       |
| Letter of Intent                     | : | 01.03.2018                       |
| Transmission Service Agreement (TSA) | : | 27.04.2017                       |
| SPV acquisition                      | : | 27.03.2018                       |
| Transmission License by CERC         | : | 27.08.2018                       |
| Tariff adoption by CERC              | : | 05.06.2018                       |
| Contract Performance Guarantee       | : | Submitted on 27.03.2018          |
| Clearance u/s 164                    | : | Received on 14.03.2019           |
| Execution plan:                      | : | Submitted in Apr'18              |
| EPC awarded on                       | : | Awarded 11.04.18                 |
| Scheduled Date of Completion         | : | 27.07.2021                       |
| Anticipated Date of Completion       | : | 27.07.2021                       |

### **Status of progress of transmission project**

#### **1. 765 kV Vindhyanchal Pooling Station- Varanasi D/C line**

Line awarded on 11.04.2018

|                        |           |
|------------------------|-----------|
| • Length:              | 189.27 Km |
| • Locations:           | 528 Nos.  |
| • Foundation completed | 194 Nos.  |
| • Tower Erection       | 109 Nos.  |
| • Stringing:           | Nil       |
| • Scheduled COD:       | Jul'21    |
| • Anticipated COD:     | Jul'21    |

### **Western Region portion:**

#### **Forest:**

Forest proposal's soft copy uploaded on Forest portal on 01.09.2018.

Hard copy in 06 sets submitted on 08.09.2018. Forest query of DFO Singrauli compiled on 08.10.18. Tree enumeration completed for all 3 divisions. Evaluation of Singrauli division completed and that of Rewa & Sidhi division under progress. CA scheme for Singrauli division approved by CCF Rewa. CA scheme for Sidhi division has been prepared.

**Wildlife (Son Ghariyal wildlife sanctuary):** Permission for soil investigation received on 21.01.19. Letter regarding permission for construction of T/L over Son & Gopad river submitted on 14.03.19

#### **Power line crossing**

|                              |   |                               |                |
|------------------------------|---|-------------------------------|----------------|
| Total no. of crossings       | : | 15 Nos.                       |                |
| Proposal submitted           | : | 15 Nos                        | Date: 16.10.18 |
| Approval obtained            | : | 7 Nos. For 400 kV Crossing    | on 11.12.18    |
| Approval obtained            | : | 5 Nos. For 765 kV Crossing    | on 03.01.19    |
| Powerline crossing of MPPTCL | : | 3 Nos. Joint survey completed | on 29.03.19    |

#### **Railway Crossing**

|                    |   |       |                |
|--------------------|---|-------|----------------|
| Proposal submitted | : | 1 No. | Date: 28.09.18 |
| Approval obtained  | : | NIL   |                |

#### **National Highway Crossing**

|                    |   |       |                |
|--------------------|---|-------|----------------|
| Proposal submitted | : | 1 No. | Date: 06.09.18 |
| Approval obtained  | : | NIL   |                |

#### **Northern Region portion:**

##### **Forest:**

Forest proposal's soft copy uploaded on forest portal on 07.09.18.  
Some queries raised by Forest department has been resolved.

NoC received from PWD & Irrigation department.  
NoC awaited from Railway & NHAI.

Application for FRA submitted. Land for afforestation is under process.

#### **Power line crossing**

|                        |   |         |                                                                                         |
|------------------------|---|---------|-----------------------------------------------------------------------------------------|
| Total no. of crossings | : | 13 Nos. | 16.10.18                                                                                |
| Proposal submitted     | : | 13 Nos  | Date: 16.10.18                                                                          |
| Approval obtained      | : | 5 Nos.  | [Date: 13.12.18 & 21.12.18]                                                             |
|                        |   |         | [ Join inspection of balance 08 crossings has been done. Approval awaited from UPPTCL ] |

#### **Railway Crossing**

|                        |   |        |                |
|------------------------|---|--------|----------------|
| Total no. of crossings | : | 2 Nos. |                |
| Proposal submitted     | : | 2 No.  | Date: 30.10.18 |
| Approval obtained      | : | NIL    |                |

#### **National Highway Crossing**

|                        |   |        |                |
|------------------------|---|--------|----------------|
| Total no. of crossings | : | 2 Nos. |                |
| Proposal submitted     | : | 2 Nos. | Date: 04.10.18 |

Approval obtained : NIL

**River crossing (Ganga):** (1 Pile & 2 RC)

Engg. Under finalisation

## **(13) Name of transmission project- System strengthening for WR**

### **Background**

A large number of IPP projects totaling to an installed capacity of 35000 MW are proposed to come in Chhattisgarh, MP, Odisha, Jharkhand and West Bengal and scheduled to commissioned by 12<sup>th</sup> plan and targeted beneficiaries are constituents of NR & WR. For evacuating power from these IPPs and delivering it to the target beneficiaries a comprehensive system has been evolved. The evolved transmission system consists of (i) dedicated transmission system from generating station to pooling point and their interconnection (ii) System strengthening common to WR and NR (iii) System strengthening in WR (iv) System strengthening in NR. This scheme is part of High Capacity Power Transmission Corridor(HPTC)-I & V, which has been planned for evacuation of power from Phase-I generation projects in Odisha and system strengthening of WR respectively.

### **Scope of transmission project**

1. Jabalpur-Bhopal 765 kV S/C line
2. Bhopal-Indore 765 kV S/C line
3. Bhopal-Bhopal (MP) 400 kV D/C line
4. Aurangabad-Dhule 765 kV S/C line
5. Dhule-Vadodara 765 kV S/C line
6. Dhule - Dhule(Mah) 400 kV D/C Line
7. 2x1500 MVA 765/400 kV s/s at Bhopal
8. 2x1500 MVA, 765/400 kV s/s at Dhule

### **General Details**

|                                      |   |                                     |
|--------------------------------------|---|-------------------------------------|
| Special Purpose Vehicle (SPV)        | : | Bhopal Dhule Trans. Co. Ltd. (SPTL) |
| Bid Process Coordinator (BPC)        | : | Power Finance Corporation           |
| Estimated Cost (Rs. crs)             | : | 2900                                |
| Request for Qualification            | : | 02.03.2010                          |
| Request for Proposal                 | : | 10.01.2011                          |
| Letter of Intent                     | : | 19.01.2011                          |
| Transmission Service Agreement (TSA) | : | 07.12.2010                          |
| SPV acquisition                      | : | 31.03.2011                          |
| Transmission License by CERC         | : | 12.10.2011                          |
| Tariff adoption by CERC              | : | 28.10.2011                          |
| Clearance u/s 164                    | : | 29.01.2013                          |
| Execution plan submitted to CEA      | : |                                     |
| Scheduled Date of Completion         | : | <b>30.03.2014</b>                   |
| Actual Date of Completion            | : | <b>Jun'2015</b>                     |

### **Status of progress of transmission project**

|                                        |   |                              |
|----------------------------------------|---|------------------------------|
| 1. Jabalpur-Bhopal 765 kV S/C line     | : | Line commissioned on 06/2015 |
| 2. Bhopal-Indore 765 kV S/C line       | : | Line commissioned on 10/2014 |
| 3. Bhopal-Bhopal (MP) 400 kV D/C line. | : | Line commissioned on 07/2014 |
| 4. Aurangabad-Dhule 765 kV S/C line    | : | Line commissioned on 10/2014 |
| 1. Dhule-Vadodara 765 kV S/C line      | : | Line commissioned on 02/2015 |

- |                                         |                              |
|-----------------------------------------|------------------------------|
| 2. Dhule - Dhule(Mah) 400 kV D/C Line : | Line commissioned on 11/2014 |
| 3. 2x1500 MVA 765/400 kV s/s at Bhopal: | S/s commissioned on 07/2014  |
| 8. 2x1500 MVA, 765/400 kV s/s at Dhule: | S/s Commissioned on 11/2014  |

**Transmission project commissioned on Jun-2015.**

## **(14) Name of transmission project - System strengthening for WR and NR**

### **Background**

A large number of IPP projects totaling to an installed capacity of 35000 MW are proposed to come in Chhattisgarh, MP, Odisha, Jharkhand and West Bengal and scheduled to commissioned by 12<sup>th</sup> plan and targeted beneficiaries are constituents of NR & WR. For evacuating power from these IPPs and delivering it to the target beneficiaries a comprehensive system has been evolved. The evolved transmission system consists of (i) dedicated transmission system from generating station to pooling point and their interconnection (ii) System strengthening common to WR and NR (iii) System strengthening in WR (iv) System strengthening in NR. This scheme is part of High Capacity Power Transmission Corridor (HPTC)-II, which has been planned for strengthening of transmission system required for transfer of power from Generating projects in Jharkhand to NR/WR.

### **Scope of transmission project**

1. Dhramjaygarh -Jabalpur 765 kV D/C line
2. Jabalpur-Bina 765 kV S/C line

### **General Details**

|                                     |   |                                                                       |
|-------------------------------------|---|-----------------------------------------------------------------------|
| Special Purpose Vehicle(SPV)        | : | Jabalpur Transmission Company Limited (Sterlite Power Trans. Limited) |
| Bid Process Coordinator(BPC)        | : | Power Finance Corporation                                             |
| Estimated Cost (Rs. crs)            | : | 1720                                                                  |
| Request for Qualification           | : |                                                                       |
| Request for Proposal                | : | 28.12.2010                                                            |
| Letter of Intent                    | : | 31.01.2011                                                            |
| Transmission Service Agreement(TSA) | : | 12.11.2013                                                            |
| SPV acquisition                     | : | 31.03.2011                                                            |
| Transmission License by CERC        | : | 12.10.2011                                                            |
| Tariff adoption by CERC             | : | 28.10.2011                                                            |
| Contract Performance Guarantee      | : |                                                                       |
| Clearance u/s 164                   | : | 2.07.2013                                                             |
| Execution plan submitted to CEA     | : |                                                                       |
| NIT issued on                       | : |                                                                       |
| EPC contract awarded on             | : |                                                                       |
| Scheduled Date of Completion        | : | 30.03.2014                                                            |
| Actual Date of Completion           | : | Sep' 2015                                                             |

### **Status of progress of transmission project**

1. Dhramjaygarh -Jabalpur 765 kV D/C lines - Line commissioned on 09/2015
2. Jabalpur-Bina 765 kV S/C line - Line commissioned on 06/2015

**Transmission project commissioned on September, 2015.**

## **(15) Name of transmission project - Scheme for enabling import of NER/ER surplus by Northern Region**

### **Background**

For meeting its power requirements in the XI plan and beyond, NR would need to import substantial amount of power from other regions. Most of this power would be imported from surplus ER and NER. For import of power by NR from generation projects proposed to come up in northern part of ER and NER, system strengthening would be required in the transmission corridors connecting from NER to ER and in the eastern part of ER. This transmission project has been proposed for strengthening of NER-ER transmission corridor. Though the scheme is physically located in North eastern and eastern region it has been conceived as an extension of NR network as this will be utilized mainly by NR for meeting its power import requirement from projects located in NER and Sikkim in ER. Substantial exportable power would be available in the NER after commissioning of Tripura Gas (740 MW), Bongaigaon TPS (9750 MW), Kameng HEP (600 MW). Subansiri HEP (2000 MW) would add further to the exportable surplus of NER. Power from hydro projects in Sikkim would also be imported by NR. The constituents of NR are likely to be allocated power from hydro projects of Kameng and Subansiri.

### **Scope of transmission project**

1. Bongaigaon - Siliguri 400 kV D/C line
2. Purnea – Bihar Shariff 400 kV D/C line

### **General Details**

|                                 |   |                                                                                           |
|---------------------------------|---|-------------------------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)   | : | East-North Interconnection Company Ltd<br>(A subsidiary of Sterlite Power Trans. Limited) |
| Bid Process Coordinator (BPC)   | : | Power Finance Corporation                                                                 |
| Estimated Cost (Rs. crs)        | : | 1700                                                                                      |
| Request for Qualification       | : |                                                                                           |
| Request for Proposal            | : | 20.10.2008                                                                                |
| Letter of Intent                | : | 07.01.2010                                                                                |
| Transmission Service Agreement  | : | 10.08.2009                                                                                |
| SPV acquisition                 | : | 31.03.2010                                                                                |
| Transmission License by CERC    | : | 28.10.2010                                                                                |
| Tariff adoption by CERC         | : | 28.10.2010                                                                                |
| Contract Performance Guarantee  | : |                                                                                           |
| Clearance u/s 164               | : | 19.05.2011                                                                                |
| Execution plan submitted to CEA | : | 20.10.2008                                                                                |
| NIT issued on                   | : |                                                                                           |
| EPC contract awarded on         | : |                                                                                           |
| Scheduled Date of Completion    | : |                                                                                           |
| Actual Date of Completion       | : | <b>Nov' 2014</b>                                                                          |

### **Status of progress of transmission project**

1. Bongaigaon-Siliguri 400 kV (Q) D/C: Line commissioned on 11/2014
2. Purnea-Bihar Sharif 400 kV D/C (Q): Line commissioned on 09/2013

**Transmission project commissioned on November, 2014.**

## **(16) Name of transmission project- Part ATS for RAPP U-7&8 in Rajasthan**

### **Background**

For evacuation of power from RAPP-5 to 8(1840 MW), RAPP-5&6 (440 MW) and RAPP-7&8 (2x700 MW), following composite system was evolved and planned to be developed in a phased manner matching with generation projects.

For RAPP -5&6 generation, following transmission system have been commissioned and are in operation;

- RAPP – Kankroli 400kV D/C line
- RAPP – Kota 400kV S/C line

For RAPP -7&8 generation, following transmission system have been planned

- RAPP – Jaipur 400kV D/C line with one ckt via Kota
- RAPP – Shujalpur 400kV D/C line

While element 1 is being taken by PGCIL, the element 2 is proposed under TBCB. This 400 kV line would also act as an inter-regional link between NR and WR. The link would also help in evacuation of power from the complex even in case of any grid constraints in NR.

### **Scope of transmission project**

1. RAPP – Shujalpur 400 kV D/C line

### **General Details**

|                                     |   |                                                                                      |
|-------------------------------------|---|--------------------------------------------------------------------------------------|
| Special Purpose Vehicle(SPV)        | : | RAPP Transmission Company Limited<br>(A subsidiary of Sterlite Power Trans. Limited) |
| Bid Process Coordinator(BPC)        | : | Power Finance Corporation                                                            |
| Estimated Cost (Rs. crs)            | : | 310                                                                                  |
| Request for Qualification           | : | 10.01.2013                                                                           |
| Request for Proposal                | : | 09.09.2013                                                                           |
| Letter of Intent                    | : | 17.09.2013                                                                           |
| Transmission Service Agreement(TSA) | : | 24.07.2013                                                                           |
| SPV acquisition                     | : | 12.03.2014                                                                           |
| Transmission License by CERC        | : | 31.07.2014                                                                           |
| Tariff adoption by CERC             | : | 23.07.2014                                                                           |
| Contract Performance Guarantee      | : | 23.11.2013                                                                           |
| Clearance u/s 164                   | : | 07.01.2015                                                                           |
| Execution plan submitted to CEA     | : | 30.06.2014                                                                           |
| NIT issued on                       | : | 08.11.2013                                                                           |
| EPC contract awarded on             | : | 18.09.2014                                                                           |
| Scheduled Date of Completion        | : | 28.02.2016                                                                           |
| Actual Date of completion           | : | November, 2016                                                                       |

### **Status of progress of transmission project**

- (1) RAPP - Shujalpur 400kV D/C line : Line Charged on 15<sup>th</sup> November 2016  
**Transmission project commissioned on Nov-16.**

## **(17)Name of transmission project - Eastern Region System Strengthening Scheme-VII**

### **Background**

In view of the growth of generation projects in different pockets of ER, it is felt desirable to strengthen the interconnection of the state grids with the regional grid to facilitate exchange of additional power between them. This scheme has been planned as the system-strengthening scheme for exchange of power between West Bengal grid and inter-state transmission system (ISTS).

### **Scope of transmission project**

1. Purulia PSPP – Ranchi 400 kV D/C line
2. Kharagpur – Chaibasa 400 kV D/C line

### **General Details**

|                                     |                                                                                                     |                                                        |
|-------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Special Purpose Vehicle(SPV):       | Purulia & Kharagpur Transmission Company Limited<br>(A subsidiary of Sterlite Power Trans. Limited) |                                                        |
| Bid Process Coordinator(BPC)        | :                                                                                                   | Power Finance Corporation                              |
| Estimated Cost (Rs. Crs)            | :                                                                                                   | 370                                                    |
| Request for Qualification           | :                                                                                                   | 28.12.2012                                             |
| Request for Proposal                | :                                                                                                   | 06.09.2013                                             |
| Letter of Intent                    | :                                                                                                   | 17.09.2013                                             |
| Transmission Service Agreement(TSA) | :                                                                                                   | 06.08.2013                                             |
| SPV acquisition                     | :                                                                                                   | 09.12.2013                                             |
| Transmission License by CERC        | :                                                                                                   | 30.05.2014                                             |
| Tariff adoption by CERC             | :                                                                                                   | 20.08.2014                                             |
| Contract Performance Guarantee      | :                                                                                                   | 22.11.2013                                             |
| Clearance u/s 164                   | :                                                                                                   | 20.05.2015                                             |
| Execution plan submitted to CEA     | :                                                                                                   | 10.03.2014                                             |
| NIT issued on                       | :                                                                                                   | 08.11.2013                                             |
| EPC contract awarded on             | :                                                                                                   | 02.12.2014 (For KC Line) &<br>27.05.2015 (For PR line) |
| Scheduled Date of Completion        | :                                                                                                   | April 2016                                             |
| Actual Date of completion           | :                                                                                                   | January, 2017                                          |

### **Status of progress of transmission project**

1. Purulia PSP (WB) – Ranchi (PG) 400 kV D/C line
  - Length: 223.4 Ckm .  
Line commissioned on 07-Jan-17
2. Chaibasa – Kharagpur 400 kV D/C line
  - Length: 323 Ckm                      Locations:426 nos

**Line Completed on Jun-16, Project Commissioned on Jan-17.**

## **(18) Name of transmission project - Northern Region System Strengthening Scheme(NRSS-XXIX)**

### **Background**

Presently the power supply to the valley is through Kishenpur – Wagoora 400 kV D/C line, Kishanpur- Pampore 220 kV D/C line and Udampur – Pampore 132 kV D/C line. Kishanpur -newwanpoh 400 kV D/C Line is under construction. All the existing and under construction line are rooted through Udampur – Batote – Banihal – Pir Panjal pass. The common corridor of the transmission line is highly prone to snow storm, landslides and other natural calamities making power supply to the Kashmir valley vulnerable. There was a complete collapse of power supply to Kashmir valley on 6th and 7th Jan.'12 due to heavy snowfall and breakdown/tripping of all three existing links between Jammu region and Kashmir valley. Further power supply to Jammu and Kashmir is basically through 400/220 kV Kishanpur substation and there is an immediate need for providing an alternate route for transfer of power from Jammu region to Kashmir valley. Further to need the high load growth anticipated in northern part of Kashmir and to cater to projected loads, a 400/220 kV substation at Amargarh in North Kashmir area is required. Accordingly, to mitigate above constraints present scheme has been proposed.

### **Scope of transmission project**

1. Establishment of 7 x 105 MVA, 400/220 kV GIS substation at Amargarh
2. Jalandhar – Samba 400 kV D/C line
3. Samba – Amargarh 400 kV D/C routed through Akhnoor & Rajouri
4. LILO of both circuits of Uri – Wagoora 400 kV D/c line at Amargarh

### **General Details**

|                                      |   |                                                                                         |
|--------------------------------------|---|-----------------------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : | NRSS-XXIX Transmission Limited<br>(Sterlite Power Trans. Limited)                       |
| Bid Process Coordinator (BPC)        | : | Rural Electrification Corporation                                                       |
| Estimated Cost (Rs. crs)             | : | 2621                                                                                    |
| Request for Qualification            | : | 02.08.2013                                                                              |
| Request for Proposal                 | : | 09.05.2014                                                                              |
| Letter of Intent                     | : | 23.05.2014                                                                              |
| Transmission Service Agreement (TSA) | : | 02.01.2014                                                                              |
| SPV acquisition                      | : | 04.08.2014                                                                              |
| Transmission License by CERC         | : | 14.11.2014                                                                              |
| Tariff adoption by CERC              | : | 10.12.2014                                                                              |
| Contract Performance Guarantee       | : | 26.06.2014                                                                              |
| Clearance u/s 164                    | : | 30.09.2015                                                                              |
| Execution plan submitted to CEA      | : | 07.11.2014                                                                              |
| NIT issued on                        | : | 15.09.2014(For J-S Line),<br>05.03.2015(For S-A line) &<br>18.09.2014(For Amargarh S/S) |
| EPC contract awarded on              | : | 15.12.2014(for JS Line), 29.07.2015 (for<br>SA Line) & 21.12.15 (for Amargarh S/S)      |
| Scheduled Date of Completion         | : | 04.10.2018                                                                              |

Actual Date of completion : August, 2018

**Status of progress of transmission projects**

**1. Jullandhar – Samba 400 kV D/C line**

Length: 270 Ckm .

**Line Commissioned on June-16.**

**2. Samba – Amargarh 400 kV D/C line**

Length: 546.8 Ckm .

Locations: 761 nos

**Line Commissioned in Aug'18.**

**3. 7x105 MVA, 400/220 kV Amargarh GIS**

**Substation commissioned in May'18.**

**4. LILO of both circuit of Uri – Wagoora 400 kV D/C line at Amargarh**

Length: 13.64 ckm

Locations: 23 nos.

**Line commissioned in Mar'18/Apr'18.**

**Transmission Project commissioned on Aug'18.**

## **(19)Name of transmission project - Connectivity lines for Maheshwaram 765/400 kV Pooling Station**

### **Background**

Presently Southern Region is facing severe power shortage. This power deficit situation has arisen mainly due to (i) delay/deferment of anticipated generation projects and (ii) also due to non-availability of gas for existing gas projects in Southern Region. Presently the existing/planned system can facilitate import of about 9000 - 10000 MW into Southern Region. However, under certain scenarios of non-availability / delay in commissioning of some of the generation projects in Southern region expected power transfer requirement is about 16000 MW by 2018-19. In view of large deficit and requirement of transmission system to meet future power transfer requirements, high capacity Inter-regional strengthening schemes were identified. The Present Scheme is part of the above identified scheme.

### **Scope of transmission project**

1. Maheshwaram (PG) – Mehboob Nagar 400 kV D/C line
2. Nizamabad – Yeddumailaram (Shankarpalli) 400kV D/c line
3. 2 No. of 400 kV line bays at Mehboob Nagar S/S of TSTRANSCO
4. 2 No. of 400 kV line bays at Yeddumailaram S/S of TSTRANSCO.

### **General Detail**

|                                      |   |                                                                  |
|--------------------------------------|---|------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : | Maheshwaram Transmission Ltd.<br>(Sterlite Power Trans. Limited) |
| Bid Process Coordinator (BPC)        | : | Rural Electrification Corporation                                |
| Estimated Cost (Rs. crs)             | : | 534                                                              |
| Request for Qualification            | : | 21.08.2014                                                       |
| Request for Proposal                 | : | 03.08.2015                                                       |
| Letter of Intent                     | : | 21.07.2015                                                       |
| Transmission Service Agreement (TSA) | : | 10.06.2015                                                       |
| SPV acquisition                      | : | 20.08.2015                                                       |
| Transmission License by CERC         | : | 23.11.2015                                                       |
| Date of tariff adoption by CERC      | : | 24.11.2015                                                       |
| Contract Performance Guarantee       | : | 18.08.2015                                                       |
| Clearance u/s 164                    | : | 23.09.2016                                                       |
| NIT issued on                        | : | 02.11.2015                                                       |
| EPC contract awarded on              | : | 13.01.2016                                                       |
| Execution plan submitted to CEA      | : | 01.12.2015                                                       |
| Scheduled Date of Completion         | : | 20.06.2018                                                       |
| Actual Date of completion            | : | December, 2017                                                   |

### **Status of progress of transmission project:**

#### **1. Maheshwaram – Mahboobnagar 400 kV D/C line**

- Length: 197.178 ckm
- Locations: 255 nos

**Line commissioned on Dec'17.**

**2. Nizamabad – Yeddumailaram (Shankarpalli) 400 kV D/C line**

- Length: 279.326 ckm
- Locations: 367 nos

**Line commissioned on Oct'17.**

**3. 2 No. of 400 kV line bays at Mehboob Nagar S/S of TSTRANSCO**

**Bay commissioned on Dec'17**

**4. 2 No. of 400 kV line bays at Yeddumailaram S/S of TSTRANSCO.**

**Bay commissioned on Oct'17.**

**Transmission Project commissioned on Dec'17.**

## **(20) Name of transmission project - Common Transmission system for phase-II generation projects in Orissa and immediate evacuation system for OPGC project (Orissa)**

### **Background**

Various IPPs, expected to be commissioned in Odisha, had applied for grant of connectivity and LTOA/LTA. Seven IPPs were considered under phase-I and transmission system for the same under implementation under HCTPC-I scheme. Further following 5 projects were considered under phase-II generation projects in Odisha;

|                                                                 |         |
|-----------------------------------------------------------------|---------|
| Sterlite Energy Ltd (Ph-I project) (LTA of 1000 MW under Ph-II) | 2400 MW |
| GMR Kamalanga Energy Ltd(Ph-II)                                 | 350 MW  |
| OPGC                                                            | 1350 MW |
| Darlipalli(NTPC)                                                | 1600 MW |
| NSL Nagapatnam Power & Infratech                                | 1320 MW |

and following transmission system has been finalized for evacuation of power from above mentioned generation projects;

#### **(i) Immediate evacuation system for Ph-II generation projects in Odisha**

- Sterlite TPP – Jharsuguda 400 kV D/C line
- GMR – Angul 400 kV D/C line
- OPGC – Jharsuguda 400 kV D/C line
- Darlipalli –Jharsuguda 400 kV D/C line
- NSL Nagapatnam – Angul 400 kV D/C line

#### **(ii) Common transmission system associated with Ph-II generation projects in Odisha**

- Angul – Jharsuguda – Dharamjaygarh 765 kV D/C line(2<sup>nd</sup>)
- Jharsuguda – Raipur pool 765 kV D/C line
- LILO of Rourkela – Raigarh 400 kV D/C line(2<sup>nd</sup>) at Jharsuguda
- Addition of 2x1500 MVA, 765/400 kV ICT at Jharsuguda
- Addition of 2x1500 MVA, 765/400 kV ICT at Angul
- Split bus arrangement at 400 kV and 765 kV bus in both Angul and Jharsuguda

### **Scope of transmission project**

1. Jharsuguda – Raipur pool 765 kV D/C line
2. OPGC – Jharsuguda 400 kV D/C line

### **General Detail**

|                                |   |                                                                                              |
|--------------------------------|---|----------------------------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)  | : | Odisha Generation Phase-II Trans. Limited<br>(A subsidiary of Sterlite Power Trans. Limited) |
| Bid Process Coordinator (BPC)  | : | Power Finance Corporation                                                                    |
| Estimated Cost (Rs. crs)       | : | 2736                                                                                         |
| Request for Qualification      | : | 23.04.2015                                                                                   |
| Request for Proposal           | : | 15.12.2015                                                                                   |
| Letter of Intent               | : | 06.01.2016                                                                                   |
| Transmission Service Agreement | : | 20.11.2015                                                                                   |
| SPV acquisition                | : | 08.04.2016                                                                                   |

|                                 |   |            |
|---------------------------------|---|------------|
| Transmission License by CERC    | : | 30.06.2016 |
| Tariff adoption by CERC         | : | 31.05.2016 |
| Contract Performance Guarantee  | : | 28.01.2016 |
| Clearance u/s 164               | : | 07.03.2017 |
| Execution plan submitted to CEA | : | 14.07.2016 |
| NIT issued on                   | : | 10.01.2016 |
| EPC contractor awarded on       | : | 23.06.2016 |
| Scheduled Date of Completion    | : | 08.08.2019 |
| Anticipated Date of Completion  | : | Jan'19     |

## **Status of progress of transmission project**

### **1. Jharsuguda – Raipur 765 kV D/C (hexa) line**

|                       |           |
|-----------------------|-----------|
| Length:               | 609.9 CKm |
| Locations:            | 782 nos   |
| Foundation completed: | 782 nos   |
| Tower erected:        | 782 nos   |
| Stringing completed:  | 609.9 CKm |
| Scheduled COD:        | Aug'19    |
| Anticipated COD:      | Jan'19    |

Received Approval for Energization certificate from CEA on 14.12.18 and line is ready for charging.

## **Constraints where Project Authority requires intervention:**

### **Status of statutory approvals:**

#### **Forest**

Details of Tr. Line Falling under Forest:-

##### **Chattisgarh Portion-**

|                               |   |                                                     |
|-------------------------------|---|-----------------------------------------------------|
| Locations                     | : | 27 nos.                                             |
| Length                        | : | 40 km                                               |
| Forest area affected (ha)     | : | 71.76 ha                                            |
| Forest proposals submitted on | : | 13.09.2016                                          |
| Current status                | : | Stage-I Approval / tree cutting permission received |

##### **Odisha Portion-**

|                               |   |                                                      |
|-------------------------------|---|------------------------------------------------------|
| Locations                     | : | 31 nos.                                              |
| Length                        | : | 25 km                                                |
| Forest area affected (ha)     | : | 94.65 ha                                             |
| Forest proposals submitted on | : | 03.10.2016                                           |
| Current status:               | : | Stage-I Approval / tree cutting permission received. |

#### **Power line crossing**

|                        |   |    |      |
|------------------------|---|----|------|
| Total no. of crossings | : | 46 | nos. |
| Proposal submitted     | : | 46 | nos. |
| Approval obtained      | : | 46 | nos. |

**Railway crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 6 | nos. |
| Proposal submitted     | : | 6 | nos. |
| Approval obtained      | : | 6 | nos. |

**National Highway Crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 6 | nos. |
| Proposal submitted     | : | 6 | nos. |
| Approval obtained      | : | 6 | nos. |

**River Crossings**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 0 | nos. |
|------------------------|---|---|------|

**PTCC approval (Chattisgarh Portion)**

|                                   |   |            |
|-----------------------------------|---|------------|
| Proposal submitted to Defence on  | : | 23.06.2016 |
| Proposal submitted to BSNL on     | : | 23.06.2016 |
| Proposal submitted to Railways on | : | 23.06.2016 |
| Current status                    | : | Received   |

**PTCC approval (Odisha Portion)**

|                                      |   |            |
|--------------------------------------|---|------------|
| Proposal submitted to Defence on     | : | 23.06.2016 |
| Proposal submitted to BSNL on        | : | 23.06.2016 |
| Proposal submitted to Railways on    | : | 23.06.2016 |
| Current status: Approval Obtained on | : | 05.09.2017 |

**Defence/Civil Aviation**

|                                                 |   |          |
|-------------------------------------------------|---|----------|
| Proposal submitted to Defence/Civil Aviation on | : |          |
| Current Status                                  | : | Obtained |

**2. OPGC TPS– Jharsuguda 400 kV D/C (triple) line**

- Length: 102.5 ckm
- Locations: 152 nos

**Line commissioned on Dec'17.**

## **(21)Name of transmission project - Creation of new 400 kV GIS in Gurgaon area and Palwal as a part of ISTS**

### **Background**

HVPNL furnished district wise load projections of Haryana for 13th Plan (2021-22). Looking at the load growth in Prithala and around Gurgaon areas, new three-400kV substation one at Kadarapur, other at Sohna Road in Gurgaon area and 400kV substation at Prithla in Palwal area as a part of Inter State Transmission System (ISTS) has been proposed to cater the load demand of Gurgaon and Palwal. The first two S/S are to cater the load demand of sector 58 to sector 67 and sector 68 to sector 80 sectors of Gurgaon respectively. The creation of Prithala S/S would meet the power demand of the area to be developed under Prithala Development Plan. Beside this it will also act as a main feeding source to Palwal, Rangla Rajpur and Meerpur Kurli.

### **Scope of transmission project**

1. Aligarh-Prithala 400 kV D/C HTLS line
2. Prithala-Kadarapur 400 kV D/C HTLS line
3. Kadarapur-Sohna road 400 kV D/C HTLS line
4. LILO of Gurgaon – Manesar 400 kV D/C (Q) line at Sohna Road
5. Neemrana(PG) – Dhanonda 400 kV D/C HTLS line
6. 2x500 MVA, 400/220 kV GIS at Kadarapur (Gurgaon)
7. 2x500 MVA, 400/220 kV GIS at Sohna Road (Gurgaon)
8. 2x500 MVA, 400/220 kV GIS at Prithala(Palwal)
9. 2 nos. of 400kV bays at Dhanonda S/S

### **General Detail**

|                                      |   |                                                                            |
|--------------------------------------|---|----------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : | Gurgaon Palwal Transmission Limited.<br>(Sterlite Power Trans. Limited)    |
| Bid Process Coordinator (BPC)        | : | Power Finance Corporation                                                  |
| Estimated Cost (Rs. crs)             | : | 1759                                                                       |
| Request for Qualification            | : | 15.10.2015                                                                 |
| Request for Proposal                 | : | 07.03.2016                                                                 |
| Letter of Intent                     | : | 17.03.2016                                                                 |
| Transmission Service Agreement (TSA) | : | 04.03.2016                                                                 |
| SPV acquisition                      | : | 14.07.2016                                                                 |
| Transmission License by CERC         | : | 29.09.2016                                                                 |
| Tariff adoption by CERC              | : | 06.09.2016                                                                 |
| Contract Performance Guarantee       | : | 11.07.2016                                                                 |
| Clearance u/s 164                    | : | 31.03.2017                                                                 |
| Execution plan submitted to CEA      | : | 09.11.2016                                                                 |
| NIT issued on                        | : | 24.06.2016 (For Transmission Line)<br>21.04.2016 (For S/s- Pre-Bid tie up) |
| EPC contract awarded on              | : | 25.11.2016 (For Transmission Line)<br>28.10.2016 (For Substation)          |
| Scheduled Date of Completion         | : | Sep'19 (38 months)                                                         |
| Anticipated Date of Completion       | : | May'19                                                                     |

## **Status of progress of transmission project:**

### **1. Aligarh-Prithala 400 kV D/C HTLS line**

|                       |           |
|-----------------------|-----------|
| Length:               | 98.56 CKm |
| Locations:            | 107 nos.  |
| Foundation completed: | 107 nos.  |
| Tower erected:        | 107 nos   |
| Stringing completed:  | 96 ckm    |
| Scheduled COD:        | May'19    |
| Anticipated COD:      | May'19    |

## **Constraints where Project Authority requires intervention:**

1. Bay readiness at Aligarh End by PGCIL.
2. Tree cutting Permission of Agra Canal Forest is pending.

## **Status of statutory approvals:**

### **Forest**

Details of Tr. Line Falling under Forest:-

|                               |   |                                     |          |
|-------------------------------|---|-------------------------------------|----------|
| Locations                     | : | 0 nos. ; Length :                   | 115 mtrs |
| Forest area (ha)              | : | 0.5332                              |          |
| Forest proposals submitted on | : | UP – 11.11.2016 , HR – 25.04.2017   |          |
| Current status                | : | UP-at RmoEF, HR – Stage-II approved |          |

### **Power line crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 3 | nos. |
| Proposal submitted     | : | 3 | nos. |
| Approval obtained      | : | 3 | nos. |

### **Railway crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 1 | nos. |
| Proposal submitted     | : | 1 | nos. |
| Approval obtained      | : | 1 | nos. |

### **National Highway Crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 2 | nos. |
| Proposal submitted     | : | 2 | nos. |
| Approval obtained      | : | 2 | nos. |

### **River Crossings**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 0 | nos. |
|------------------------|---|---|------|

### **PTCC approval**

|                                   |   |            |
|-----------------------------------|---|------------|
| Proposal submitted to Defence on  | : |            |
| Proposal submitted to BSNL on     | : |            |
| Proposal submitted to Railways on | : |            |
| Current status                    | : | Received.. |

### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on : 27.07.2017  
Current Status: NOC from Defence received and Civil Aviation also received.

## 2. Prithala-Kadarpur 400 kV D/C HTLS line

|                       |          |
|-----------------------|----------|
| Length:               | 54.9 Ckm |
| Locations:            | 69 nos.  |
| Foundation completed: | 64 nos   |
| Tower erected:        | 59 nos   |
| Stringing completed:  | 20 ckm   |
| Scheduled COD:        | May'19   |
| Anticipated COD:      | May'19   |

### Constraints where Project Authority requires intervention:

#### Status of statutory approvals:

##### Forest

Details of Tr. Line Falling under Forest:-

|                               |   |                    |
|-------------------------------|---|--------------------|
| Locations                     | : | 7 nos.             |
| Length                        | : | 3188 mtrs          |
| Forest area affected (ha)     | : | 14.6613            |
| Forest proposals submitted on | : |                    |
| Current status                | : | Stage-II received. |

##### Power line crossing

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 4 | nos. |
| Proposal submitted     | : | 4 | nos. |
| Approval obtained      | : | 4 | nos. |

##### Railway crossing

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 1 | nos. |
| Proposal submitted     | : | 1 | nos. |
| Approval obtained      | : | 1 | nos. |

##### National Highway Crossing

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 1 | nos. |
| Proposal submitted     | : | 1 | nos. |
| Approval obtained      | : | 1 | nos. |

##### River Crossings

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 0 | nos. |
| Proposal submitted     | : | 0 | nos. |
| Approval obtained      | : | 0 | nos. |

##### PTCC approval

|                                   |   |                    |
|-----------------------------------|---|--------------------|
| Proposal submitted to Defence on  | : |                    |
| Proposal submitted to BSNL on     | : |                    |
| Proposal submitted to Railways on | : |                    |
| Current status                    | : | Approval Received. |

##### Defence/Civil Aviation

|                                                 |   |  |
|-------------------------------------------------|---|--|
| Proposal submitted to Defence/Civil Aviation on | : |  |
|-------------------------------------------------|---|--|

Current Status: NOC from Defence and civil aviation received.

### 3. Kadarapur-Sohna road 400 kV D/C HTLS line

|                       |           |
|-----------------------|-----------|
| Length:               | 22.14 Ckm |
| Locations:            | 29 nos.   |
| Foundation completed: | 21 nos    |
| Tower erected:        | 19 nos    |
| Stringing completed:  | 0 ckm     |
| Scheduled COD:        | Sep'19    |
| Anticipated COD:      | May'19    |

#### Constraints where Project Authority requires intervention:

1. One Power Line crossing approval is pending with HVPNL
2. Right of way (RoW) issue raised by Indiabulls in Village – Harcharndpur, Tehsil – Sohna, District – Gurgaon (Haryana)

#### Status of statutory approvals:

##### Forest

Details of Tr. Line Falling under Forest:- Locations: 7 nos. Length: 3146 mtrs

Forest area affected (ha) : 14.4716

Forest proposals submitted on .04.10.17

Current status: Stage-II Received.

##### Power line crossing

|                        |   |   |      |       |
|------------------------|---|---|------|-------|
| Total no. of crossings | : | 3 | nos. |       |
| Proposal submitted     | : | 3 | nos. | Date: |
| Approval obtained      | : | 2 | nos. | Date: |

##### Railway crossing

|                        |   |   |      |       |
|------------------------|---|---|------|-------|
| Total no. of crossings | : | 0 | nos. |       |
| Proposal submitted     | : | 0 | nos. | Date: |
| Approval obtained      | : | 0 | nos. | Date: |

##### National Highway Crossing

|                        |   |   |       |       |
|------------------------|---|---|-------|-------|
| Total no. of crossings | : | 1 | nos.  |       |
| Proposal submitted     | : | 1 | nos.  | Date: |
| Approval obtained      | : | 1 | nos.. | Date: |

##### River Crossings

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 0 | nos. |
|------------------------|---|---|------|

##### PTCC approval

Proposal submitted to Defence on .....

Proposal submitted to BSNL on .....

Proposal submitted to Railways on .....

Current status : Approval Received

##### Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation

Current Status: Received Civil and Defence clearance..

#### 4. LILO of Gurgaon – Manesar 400 kV D/C (Q) line at Sohna Road

|                       |          |
|-----------------------|----------|
| Length:               | 0.78 Ckm |
| Locations:            | 2 nos.   |
| Foundation completed: | 0 nos    |
| Tower erected:        | 0 nos    |
| Stringing completed:  | 0 nos    |
| Scheduled COD:        | Sep'19   |
| Anticipated COD:      | May'19   |

#### Constraints where Project Authority requires intervention:

1. Finalisation of tapping point is pending with PGCIL.

#### Status of statutory approvals:

##### Forest

Details of Tr. Line Falling under Forest:- Locations:0 nos. Length: 0 kms

Forest area affected (ha) : Nil

Forest proposals submitted on .....

Current status:

##### Power line crossing

|                        |   |   |      |       |
|------------------------|---|---|------|-------|
| Total no. of crossings | : | 0 | nos. |       |
| Proposal submitted     | : | 0 | nos. | Date: |
| Approval obtained      | : | 0 | nos. | Date: |

##### Railway crossing

|                        |   |   |      |       |
|------------------------|---|---|------|-------|
| Total no. of crossings | : | 0 | nos. |       |
| Proposal submitted     | : | 0 | nos. | Date: |
| Approval obtained      | : | 0 | nos. | Date: |

##### National Highway Crossing

|                        |   |   |      |       |
|------------------------|---|---|------|-------|
| Total no. of crossings | : | 0 | nos. |       |
| Proposal submitted     | : | 0 | nos. | Date: |
| Approval obtained      | : | 0 | nos. | Date: |

##### River Crossings

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 0 | nos. |
|------------------------|---|---|------|

##### PTCC approval

Proposal submitted to Defence on .....

Proposal submitted to BSNL on .....

Proposal submitted to Railways on .....

Current status: **Approval Received**

##### Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on.....

Current Status: **Received Civil and Defense clearance**

#### 5. Neemrana(PG) – Dhanonda 400 kV D/C HTLS line

Length: 93.43 Ckm  
Locations: 111 nos.

**Transmission line commissioned in Feb'19**

#### Status of statutory approvals:

##### Forest

Details of Tr. Line Falling under Forest:- Locations: **1** nos. Length: 453 mtrs  
Forest area affected (ha) : **2.0386**  
Forest proposals submitted on **20.10.16**  
Current status: Stage-2 Approved for Haryana and Rajsthan portion

##### Power line crossing

|                        |   |    |      |       |
|------------------------|---|----|------|-------|
| Total no. of crossings | : | 10 | nos. |       |
| Proposal submitted     | : | 10 | nos. | Date: |
| Approval obtained      | : | 10 | nos. | Date: |

##### Railway crossing

|                        |   |   |      |       |
|------------------------|---|---|------|-------|
| Total no. of crossings | : | 2 | nos. |       |
| Proposal submitted     | : | 2 | nos. | Date: |
| Approval obtained      | : | 2 | nos. | Date: |

##### National Highway Crossing

|                        |   |   |      |       |
|------------------------|---|---|------|-------|
| Total no. of crossings | : | 1 | nos. |       |
| Proposal submitted     | : | 1 | nos. | Date: |
| Approval obtained      | : | 1 | nos. | Date: |

##### River Crossings

|                        |   |   |      |  |
|------------------------|---|---|------|--|
| Total no. of crossings | : | 0 | nos. |  |
|------------------------|---|---|------|--|

##### PTCC approval

Proposal submitted to Defence on .....  
Proposal submitted to BSNL on .....  
Proposal submitted to Railways on .....  
Current status: **NOC Received.**

##### Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on: **25.07.17**  
Current Status: **Civil Aviation NOC Received/Defence Received**

#### 6. 2x500 MVA, 400/220 kV GIS at Kadarpur (Gurgaon)

Land Acquired: 100%.

|                       |        |
|-----------------------|--------|
| Civil work completed: | 54%    |
| Equipment supplied:   | 98%    |
| Equipment erection:   | 12%    |
| Scheduled COD         | May'19 |
| Anticipated COD:      | May'19 |

**Constraints/Approval if any:**

**7. 2x500 MVA, 400/220 kV GIS at Sohna Road (Gurgaon)**

|                       |        |
|-----------------------|--------|
| Land Acquired:        | 100%.  |
| Civil work completed: | 48%    |
| Equipment supplied:   | 96%    |
| Equipment erection:   | 11%    |
| Scheduled COD         | Sep'19 |
| Anticipated COD:      | May'19 |

**Constraints/Approval if any:** During meeting held in CEA, HVPNL has raised the issue of difficulty in finalizing the route of 220 kV D/S line. In pursuance to the meeting, a committee comprising of the members from CEA, HVPNL and GPTL have been formed to review the route of D/s 220 kV line from Sohna road, Kadarpur and Prithla S/s. In the meeting held on 16-11-2018 during site visit of Technical Committee comprising officers from CEA, HVPNL and GPTL, M/s GPTL conveyed that construction of 220kV line up to and including dead end tower is not in the scope of M/s GPTL being executed under TBCB process. However, HVPNL may send formal proposal for termination of 220 kV lines or any other important elements of HVPNL to be constructed.

**8. 2x500 MVA, 400/220 kV GIS at Prithala(Palwal)**

|                       |        |
|-----------------------|--------|
| Land Acquired:        | 100%   |
| Civil work completed: | 77%    |
| Equipment supplied:   | 98%    |
| Equipment erection:   | 35%    |
| Scheduled COD         | May'19 |
| Anticipated COD:      | May'19 |

**Constraints/Approval if any: NIL**

**9. 2 nos. of 400kV bays at Dhanonda S/S**

|                       |                                           |
|-----------------------|-------------------------------------------|
| Land Acquired:        | 100 % (Space provided by HVPNL.)          |
| Civil work completed: | 100%                                      |
| Equipment supplied:   | 100%                                      |
| Equipment erection:   | 100%                                      |
| Scheduled COD         | May'19                                    |
| Actual COD:           | Bays charged on 20-06-2018 and 14-07-2018 |

## **(22)Name of transmission project - Connectivity system for Khargone TPP (2x660 MW)**

### **Background**

NTPC Ltd. has planned to establish a 1320MW (2x660MW) thermal power project at Khandwa in the state of Madhya Pradesh. Accordingly, transmission system for evacuation of power from generation project has been evolved.

### **Scope of transmission project**

1. LILO of one ckt of Khandwa - Rajgarh 400kV D/C line at Khargone TPP  
(The LILO shall be used for start-up power and commissioning activities requirement. After commissioning of balance transmission system, the LILO would be bypassed at Khargone generation switchyard and may be utilized only under contingency condition)
2. Khargone TPP – Khandwa pool 400 kV D/C (Quad) line
3. System strengthening in WR
  - i. Khandwa Pool – Indore 765kV D/C line
  - ii. Khandwa Pool – Dhule 765 kV D/C line
  - iii. Establishment of 765/400kV, 2x1500MVA pooling station at Khandwa  
**765 kV:**
    - ICTs: 7x500MVA, 765/400 kV (1 spare unit)
    - ICT bays: 2 no.
    - Line bays: 4 no. (2 no. for Khandwa pool – Indore 765 kV D/C & 2 no. for Khandwa Pool – Dhule 765 kV D/C)
    - Bus reactor: 3 X 80 MVAR
    - Bus reactor bay: 1 no.
    - Switchable Line reactors: 7 X 80 MVAR (1 unit is as a spare unit) for Khandwa Pool – Dhule 765 kV D/C (each 240 MVAR reactor with 800  $\Omega$  NGR along with its auxiliaries)
    - Space for line bays (future): 4 no.
    - Space for ICT bays (future): 3 no.
    - Space for 1500 MVA, 765/400 kV ICTs (future): 3 no.**400 kV:**
    - ICT bays: 2 no.
    - Line bays for termination of Khargone TPP– Khandwa PS 400 kV D/C line: 2 no.
    - Bus reactor: 1 X 125 MVAR
    - Bus reactor bay: 1
    - Space for line bays (future): 6 no.
    - Space for ICT bays (future): 3 no.
    - 2 nos. of 765 kV line bays and 7 X 80 MVAR Switchable line reactors (1 unit as spare) along with 800  $\Omega$  NGR & its auxiliaries for Khandwa Pool – Dhule 765 kV D/C at Dhule 765/400 kV substation of M/s BDTCL.

## General Details

|                                      |                                                                      |
|--------------------------------------|----------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : Khargone Transmission Limited (SPTL)                               |
| Bid Process Coordinator (BPC)        | : RECTPCL                                                            |
| Estimated Cost (Rs. crs)             | : 2136.59 Crs                                                        |
| Request for Qualification            | : 30.11.2015                                                         |
| Request for Proposal                 | : 11.02.2016                                                         |
| Letter of Intent                     | : 26.05.2016                                                         |
| Transmission Service Agreement (TSA) | : 14.03.2016                                                         |
| SPV acquisition                      | : 22.08.2016                                                         |
| Transmission License by CERC         | : 17.11.2016                                                         |
| Tariff adoption by CERC              | : 11.11.2016                                                         |
| Contract Performance Guarantee       | : 08.07.2016                                                         |
| Clearance u/s 164                    | : 05.07.2017                                                         |
| Execution plan submitted to CEA      | : 18.12.2016                                                         |
| NIT issued on                        | : 27.05.2016 (For Transmission Lines)<br>29.06.2016 (For Substation) |
| EPC contract awarded on              | : 25.11.2016 (For Transmission Lines)                                |
| Scheduled Date of Completion         | : July 2019                                                          |
| Anticipated Date of Completion       | : July 2019                                                          |

### Status of progress of transmission project;

#### 1. LILO of one ckt of Khandwa - Rajgarh 400kV D/C line at Khargone TPP

|           |             |
|-----------|-------------|
| Length    | :13.574 CKm |
| Locations | :21 nos.    |

### Line Commissioned in Feb, 2018.

#### 2. Khargone TPP – Khandwa pool 400 kV D/C (Quad) line

|                         |            |
|-------------------------|------------|
| • Length:               | 49.423 CKm |
| • L Locations:          | 66 nos.    |
| • Foundation completed: | 62 nos     |
| • Tower erected:        | 53 nos     |
| • Stringing completed:  |            |
| • Scheduled COD:        | Jul'19     |
| • Anticipated COD:      | Jul'19     |

### Constraints where Project Authority requires intervention:

1. Introduction of new guidelines for determination of Land & Corridor compensation in the state of Madhya Pradesh which has led to the increase in cost of the project. Notices served to LTTC's

### Status of statutory approvals:

#### Forest

Details of Tr. Line Falling under Forest: Locations: 0 nos. Length: 1095.69 Mtr.

Forest area affected (ha): 0.828 (Barwah Division)

Forest proposals submitted on 16 Nov 2016

Current status: **Approval IN-PRINCIPLE (Working Permission Recieved) Stage-II**

## Approval under progress

### Power line crossing

Total no. of crossings : 4 (EB), 2 (PG-KNW) nos.

Proposal submitted 4nos. (EB) Date: 28-09-20182 (PG-KNW) nos. Date: 21-02-17 (PG-KNW)

Approval obtained : 2 (PG-KNW) nos. Date: 28-06-17 (PG-KNW)

### Railway crossing

Total no. of crossings : 0 nos.

Proposal submitted : 0 nos. Date:

Approval obtained : 0 nos. Date:

### National Highway Crossing

Total no. of crossings : 0 nos.

Proposal submitted : 0 nos. Date:

Approval obtained : 0 nos. Date:

### River Crossings

Total no. of crossings : 0 nos.

### PTCC approval

Proposal submitted to Defence on 29-06-17

Proposal submitted to BSNL on 17-06-17

Proposal submitted to Railways on 19-06-17

Current status: NOC Recieved

### Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on 13-07-17 (DA) / NR (CA)

Current Status: NOC received vide letter no. AirHQ/S 17726/4/ATS(ty BM-DCCI) dated 16th Oct'17.

## 3. System strengthening in WR

### i. Khandwa Pool – Indore 765kV D/C line

Length: 179.14 CKm

Locations: 243 nos.

Foundation completed: 243 nos.

Tower erected: 243 nos.

Stringing completed: 168 ckm

Scheduled COD: Jul'19

Anticipated COD: May'19

### Constraints where Project Authority requires intervention:

1. Introduction of new guidelines for determination of Land & Corridor compensation in the state of Madhya Pradesh which has led to the increase in cost of the project. Notices served to LTTC's.
2. NH-3 Crossing Approval is pending with NHAI

## **Status of statutory approvals:**

### **Forest**

Details of Tr. Line Falling under Forest: Locations: 49nos. Length: 25847Mtr.

Forest area affected (ha): 112.672 {40.223 (Barwah Division) + 72.449 (Indore Div.)}

Forest proposals submitted on 16 Nov 2016

Current status: Tree cutting permission received vide letter No. F-11/2018/10-11/18 dtd 02.01.18. (Tree cutting Permission Recieved) Stage II Approval under progress

### **Power line crossing**

Total no. of crossings : 10 (EB), 1 (PG-KNW), 3 (PG-IND) nos.

Proposal submitted : 10 (EB), 1 (PG-KNW), 3 (PG-IND) nos. Date: 29-06-17 (EB), 21-02-17 (PG-KNW), 03-01-17 (PG-IND)

Approval obtained : 10nos. (EB), 1no. (PG-KNW) dated 29-8-17, 3nos. (PG-IND) dated 03-06-2017

### **Railway crossing**

Total no. of crossings : 2 nos.

Proposal submitted : 2 nos. Date: 23-05-2017

Approval obtained : **NOC Recieved**

### **National Highway Crossing**

Total no. of crossings : 2 nos.

Proposal submitted : NH3 Date: 06-03-17, NH59A) Date: 27-07-17

Approval obtained : NH59A Date: 10-08-2018

### **River Crossings**

Total no. of crossings : 1 no.

Proposal submitted : Not Required 1 no. Date:

Approval obtained: Not Required 1 no. Date:

### **PTCC approval**

Proposal submitted to Defence on 20-05-17

Proposal submitted to BSNL on 12-05-17

Proposal submitted to Railways on 19-06-17

Current status: **NOC Recieved**

### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on 13-07-17 (DA) / 01-06-17 (CA)

Current Status: NOC received vide letter no. AirHQ/S 17726/4/ATS(ty BM-DCCI) dated 16th Oct'17.(DA) / NOC RECIEVED 22-06-17 (CA)

## **ii. Khandwa Pool – Dhule 765 kV D/C line**

Length: 378.1 CKm

Locations: 486 nos.

Foundation completed: 483 nos.

Tower erected: 477 nos.

Stringing completed: 328 ckm

Scheduled COD: Jul'19

Anticipated COD: May'19

**Constraints where Project Authority requires intervention:**

1. Introduction of new guidelines for determination of Land & Corridor compensation in the state of Madhya Pradesh and Maharashtra which has led to the increase in cost of the project. Notices served to LTTC's.
2. Work has been stopped due to passing of line through submergence area of proposed Jamphal Dam in Maharashtra.

**Status of statutory approvals:****Forest**

Details of Tr. Line Falling under Forest: Locations: 62 nos. Length: 61144Mtrs.

Forest area affected (ha): 159.126 [KD-MP: 39.437 {11.866 (Barwah Division) + 27.571 (Sendhwa Division)} + KD-MH: 119.689 (Dhule Division)]

Forest proposals submitted on KD-MP: 30 Nov 2016 KD-MH: 03 Dec 2016

Current status:

KD-MP: Stage I Recieved (Working Permssion Recieved) Stage II Approval under progress

KD-MH: REC meeting done, Stage I clearance recieved, Stage II Approval under progress

**Power line crossing**

Total no. of crossings : 9 (EB-MP), 1 (EB-MH), 2 (PG-KNW), 2(BDTCL), 1(KTL) nos.

Proposal submitted : 9 (EB-MP), 1 (EB-MH), 2 (PG-KNW) nos. Date: 29-06-17 (EB-MP), 30-05-17 (EB-MH), 21-02-17 (PG-KNW) , 01-07-17 (BDTCL) ;2Nos.

1Nos. Submission pending(For U/C line KTL)

Approval obtained : 7nos. (EB-MP) Date: 16-10-17, 20-11-17, 26-11-17, 29-11-17, 1no. (EB-MH) Date: 19-07-17, 2nos. (PG-KNW) Date: 19-08-17, 2nos. (U/C EB-MP) Date: 26-02-18

**Railway crossing**

Total no. of crossings : 1 no.

Proposal submitted : 1 nos., 07-05-17 (NH3)

Approval obtained : In principal approval received vide letter no. 770 dated 04.08.17

**National Highway Crossing**

Total no. of crossings : 1 nos.

Proposal submitted : 1 nos., 07-05-17 (NH3)

Approval obtained : In principal approval received vide letter no. 770 dated 04.08.17

**River Crossings**

Total no. of crossings : 1 no.

Proposal submitted : Not Required 1 no. Date:

Approval obtained: Not Required 1 no. Date:.

**PTCC approval**

Proposal submitted to Defence on 20-05-17

Proposal submitted to BSNL on 12-05-17

Proposal submitted to Railways on 19-06-17

Current status: **NOC Recieved**

**Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on 13-07-17 (DA) / NR (CA)  
Current Status: NOC received vide letter no. AirHQ/S 17726/4/ATS(ty BM-DCCI) dated 16th Oct'17.(DA).

**iii. Establishment of 2x1500MVA, 765/400kV, pooling station at Khandwa**

|                       |        |
|-----------------------|--------|
| Land Acquired:        | 100%   |
| Civil work completed: | 69%    |
| Equipment supplied:   | 97%    |
| Equipment erection:   | 28%    |
| Scheduled COD         | Jul'19 |
| Anticipated COD:      | Jul'19 |

**Constraints where Project Authority requires intervention:**

1. Agitation from farmers for land acquisition.

**iv. 2 No. of 765 kV line bays at Dhule S/S of BDTCL for Khandwa Pool – Dhule 765kV D/C Line**

|                       |                                                          |
|-----------------------|----------------------------------------------------------|
| Land Acquired:        | 100%                                                     |
| Civil work completed: | 100%                                                     |
| Equipment supplied:   | 100%                                                     |
| Equipment erection:   | 100%                                                     |
| Scheduled COD         | Jul'19                                                   |
| Anticipated COD:      | 15-Oct-2018 (Electrical Inspection Done on 18-Sept-2018) |

## **(23) Transmission project - Transmission system for NER System Strengthening Scheme-II (Part-B) and V (NER-IIB & V)**

### **Background**

This scheme has been planned to strengthen the interconnection between the states of Assam and Arunachal Pradesh and strong interconnection between northern and southern part of North Eastern Region and would also facilitate dispersal of power from central sector/private generation projects to various parts of NER.

### **Scope of transmission project**

1. Establishment of 400/132 kV, 7x105MVA single phase (including one spare) S/s at Surajmaninagar

#### **400kV**

- ICTs: 400/132 kV, 7x105 MVA single phase (including one spare)
- ICTs bays: 2 no.
- Line bays: 2 no.  
[2 no. for Palatana – Surajmanigagar and 2 no. for Surajmaninagar – PK Bari 400 kV D/C Line]
- Bus reactor bays: 2x125 MVAR
- Bus reactor bays: 2 no.
- Space for future line bays (incl. space for sw. line reactor): 6 no.
- Space for ICT bays: 1 no.

#### **132 kV**

- ICTs bays: 2 no.
- Line bays: 2 no.  
[2 no. for Surjmaninagar (TSECL) - Surajmaninagar (TBCB) 132 kV Line with high capacity/HTLS (equivalent to single moose)]
- Space for future line bays: 6 no.
- Space for ICT Bays: 1 no.  
Space for future 400/132 kV, 315MVA ICT  
TSP is free to choose the location of Surajmaninaagar S/s within a radius of 10 km from the Surajmaninagar (TSECL) S/s.

2. Establishment of 400/132 kV, 7x105 MVA Single phase (including one spare) S/s at P.K. Bari.

#### **400 kV**

- ICTs 400/132 kV, MVA single (including one spare)
- ICTs bays: 2 no.
- Line bays: 4 no.  
[2 no. for Surajmaninagar – P. K. Bari and 2 no. for P. K. Bari – Silchar 400 kV D/C line]
- Bus reactor: 2x125 MVAR
- Bus reactor bays: 2 no.
- Space for future line bays (including space for sw. line reactor): 6 no.  
Space of ICT bays: 1 No

### **132 kV**

- ICTs bays; 2 no.
  - Line bays: 2no.  
[2 no. for P.K. Bari (TSECL) – P. K. Bari (TBCB) 132kV D/C line with high Capacity/HTLS (equivalent of single moose)]
  - Space for future line bays: 6 no.
  - Space for ICT bays: 1 no.  
Space for future 400/132 kV, 315 MVA ICT
3. Surajmaninagar - P. K. Bari 400 kV D/c line (Twin ACSR Moose)
4. AGTPP (NEEPCO) – P.K. Bari (TSECL) 132 kV D/c line with high capacity HTLS conductor (equivalent to single moose ampacity at 85°C)
5. Biswanath Chariyalli (POWERGRID) – Itanagar 132kV D/c (Zebra conductor) line
6. Silchar (POWERGRID) – Misa (POWERGRID) 400kV D/c (Quad) line.
7. LILO of one circuit of Biswanath Chariyalli (POWERGRID) – Itanagar 132kV D/c (Zebra conductor) line at Gohpur (AEGCL)
8. Line Bays:
- 2 no. 132 kV line bays for termination of AGTPP (NEEPCO) – P.K. Bari (TSECL) 132kV D/c line at AGTPP (NEEPCO) Switchyard:
  - 2 no. 132 kV line bays for termination of AGTPP (NEEPCO) – P.K. Bari (TSECL) 132kV D/c line at P.K. Bari (TSECL) S/s:
  - 2 nos. 132kV line bays for termination of Biswanath Chariyalli (POWERGRID) – Itanagar 132kV D/c (Zebra conductor) line at Itanagar S/s (Ar. Pradesh)
  - 2 no. 400 kV line bays at Palatana GBPP switchyard for termination of Palatana - Surajmaninagar 400kV D/c line.

### **General Details**

|                                      |   |                                    |
|--------------------------------------|---|------------------------------------|
| Special Purpose Vehicle              | : | NER II Transmission Limited (SPTL) |
| Bid Process Coordinator              | : | Rural Electrification Corporation  |
| Estimated Cost (Rs. crs)             | : | 2471.10                            |
| Request for Qualification            | : | 29.12.2015                         |
| Request for Proposal                 | : | 18.01.2017                         |
| Letter of Intent                     | : | 22.02.2017                         |
| Transmission Service Agreement (TSA) | : | 27.12.2016                         |
| SPV acquisition                      | : | 31.03.2017                         |
| Transmission License by CERC         | : | 20.06.2017                         |
| Tariff adoption by CERC              | : | 12.06.2017                         |
| Contract Performance Guarantee       | : | 27.03.2017                         |
| Clearance u/s 164                    | : | 31.08.2018                         |
| Execution plan submitted to CEA      | : | 24.07.2017                         |
| Scheduled Date of Completion         | : | Nov 2020                           |

## Status of progress of transmission project;

### 1. 2x315 MVA, 400/132 kV S/S at Surajmaninagar

|                      |         |
|----------------------|---------|
| Land Acquired        | :90%    |
| Civil work completed | :27%    |
| Equipment supplied   | :97%    |
| Equipment erection   | : 2%    |
| Scheduled COD        | :Jul'20 |
| Anticipated COD      | :Jul'19 |

#### Constraints/Approval if any:

### 2. 2x315 MVA, 400/132 kV S/S at P.K. Bari

|                        |         |
|------------------------|---------|
| • Land Acquired        | :90%    |
| • Civil work completed | :46%    |
| • Equipment supplied   | :95%    |
| • Equipment erection   | :2%     |
| • Scheduled COD        | :Jul'20 |
| • Anticipated COD      | :Jul'19 |

#### Constraints/Approval if any:

### 3. Surajmaninagar - P. K. Bari 400 kV D/C line

|                      |               |
|----------------------|---------------|
| Length               | : 154.212 ckm |
| Locations            | : 208 nos     |
| Foundation completed | : 110 nos     |
| Tower erected        | : 67 nos      |
| Stringing completed  | : 5 ckm       |
| Scheduled COD        | : Jul'20      |
| Anticipated COD      | : Jul'19      |

#### Constraints where Project Authority requires intervention:Nil.

#### Status of statutory approvals:

##### Forest

Details of Tr. Line Falling under Forest:-

|                               |                                                |
|-------------------------------|------------------------------------------------|
| Locations                     | : 79 nos.                                      |
| Length                        | : 30.41 Km (36.632 KM forest affected stretch) |
| Forest area (ha)              | : 139.931 ha                                   |
| Forest proposals submitted on | : Submitted online on 09-Jan-18                |
| Current status                | : Stage-I received                             |

##### Power line crossing

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 4 | nos. |
| Proposal submitted     | : | 4 | nos. |
| Approval obtained      | : | 4 | nos. |

##### Railway crossing

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 1 | nos. |
|------------------------|---|---|------|

|                    |   |   |      |
|--------------------|---|---|------|
| Proposal submitted | : | 1 | nos. |
| Approval obtained  | : | 1 | nos. |

#### **National Highway Crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 1 | nos. |
| Proposal submitted     | : | 1 | nos. |
| Approval obtained      | : | 1 | nos. |

#### **River Crossings**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 0 | nos. |
|------------------------|---|---|------|

#### **PTCC approval**

Proposal submitted to Defence on – 17-Apr-18

Proposal submitted to BSNL on – 28-Apr-18

Proposal submitted to Railways on - 19-Apr-18

Current status: PTCC Approval received.

#### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on - Civil Aviation Submitted on 16 July'18,

Aviation Defence submitted on 29-Aug'18

Current Status: Approval Awaited

#### **4. AGTPP (NEEPCO) – P.K. Bari (TSECL) 132 kV D/c line**

Detailed Survey is completed.

|                      |   |            |
|----------------------|---|------------|
| Length               | : | 166.85 ckm |
| Locations            | : | 239 nos.   |
| Foundation completed | : | 138 nos    |
| Tower erected        | : | 99 nos     |
| Stringing completed  | : | 22 ckm     |
| Scheduled COD        | : | Mar'20     |
| Anticipated COD      | : | Jul'19     |

**Constraints where Project Authority requires intervention:** nil

#### **Status of statutory approvals:**

##### **Forest**

Details of Tr. Line Falling under Forest:-

Locations: 20nos.

Length: 6.5km (7.65 KM forest affected stretch)

Forest area affected (ha) : 17.569 ha

Forest proposals submitted on 10-01.18

Current status: Stage-I received on 12 OCT'18, Final Tree cutting permission received

**Power line crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 4 | nos. |
| Proposal submitted     | : | 4 | nos. |
| Approval obtained      | : | 3 | nos. |

**Railway crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 0 | nos. |
| Proposal submitted     | : | 0 | nos. |
| Approval obtained      | : | 0 | nos. |

**National Highway Crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 0 | nos. |
| Proposal submitted     | : | 0 | nos. |
| Approval obtained      | : | 0 | nos. |

**River Crossings**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 0 | nos. |
|------------------------|---|---|------|

**PTCC approval**

Proposal submitted to Defence on - 17-Apr-18

Proposal submitted to BSNL on - submitted

Proposal submitted to Railways on - 19-Apr-18

Current status: PTCC clearance received on 20 Sep'18.

**Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on - submitted

Current Status: Civil Aviation Submitted on 16 July'18, Aviation Defence submitted on 29-Aug'18

**5. Biswanath Chariyalli (PG) – Itanagar 132kV D/c (Zebra) line**

Detailed Survey Completed

|                      |   |            |
|----------------------|---|------------|
| Length               | : | 133.64 ckm |
| Locations            | : | 202 nos    |
| Foundation completed | : | 81 nos     |
| Tower erected        | : | 28 nos     |
| Stringing completed  | : | 0          |
| Scheduled COD        | : | Mar'20     |
| Anticipated COD      | : | Jul'19     |

**Constraints where Project Authority requires intervention:**

1. NOC from AAI is pending for Itanagar Halong green field Airport
2. NOC is pending for the Private Air field at Kolapani

**Status of statutory approvals:****Forest**

Details of Tr. Line Falling under Forest:-

|                               |   |                                                        |
|-------------------------------|---|--------------------------------------------------------|
| Locations                     | : | 68nos.                                                 |
| Length                        | : | 21.631km                                               |
| Forest area affected (ha)     | : | 48.147                                                 |
| Forest proposals submitted on | : | 31.07.2017(online submission date) Revised on 06.03.18 |

Current status : Assam state forest Stage-I received, Tree Cutting permission awaited. Arunachal Pradesh state forest file is at MoEF.

**Power line crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 2 | nos. |
| Proposal submitted     | : | 2 | nos. |
| Approval obtained      | : | 2 | nos. |

**Railway crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 1 | nos. |
| Proposal submitted     | : | 1 | nos. |
| Approval obtained      | : | 0 | nos. |

**National Highway Crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 2 | nos. |
| Proposal submitted     | : | 2 | nos. |
| Approval obtained      | : | 2 | nos. |

**River Crossings**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 0 | nos. |
| Proposal submitted     | : | 0 | nos. |
| Approval obtained      | : | 0 | nos. |

**PTCC approval**

Proposal submitted to Defence on - Not yet submitted  
Proposal submitted to BSNL on - Not yet submitted  
Proposal submitted to Railways on - Not yet submitted  
Current status: Submitted to PTCC Coordinator, Assam

**Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on - submitted  
Current Status:

**6. Silchar (PG) – Misa (PG) 400kV D/c (Q) line**

Detailed Survey Completed

|                      |   |            |
|----------------------|---|------------|
| Length               | : | 349.44 ckm |
| Locations            | : | 487 nos    |
| Foundation completed | : | 334 nos    |
| Tower erected        | : | 218 nos    |
| Stringing completed  | : | 4 Ckm      |
| Scheduled COD        | : | Nov'20     |
| Anticipated COD      | : | Jul'19     |

**Constraints where Project Authority requires intervention:**

**Status of statutory approvals:**

**Forest**

Details of Tr. Line Falling under Forest:-

|           |   |         |
|-----------|---|---------|
| Locations | : | 62nos.  |
| Length    | : | 24.24km |

Forest area (ha) : 108.162  
Forest proposals submitted on: 4-Aug-17 (online submission date)  
Current status : Stage-1 & tree cutting permission received

**Power line crossing**

Total no. of crossings : 19 nos.  
Proposal submitted : 19 nos.  
Approval obtained : 11 nos.

**Railway crossing**

Total no. of crossings : 4 nos.  
Proposal submitted : 4 nos.  
Approval obtained : 4 nos.

**National Highway Crossing**

Total no. of crossings : 4 nos.  
Proposal submitted : 4 nos.  
Approval obtained : 4 nos.

**River Crossings**

Total no. of crossings : 0 nos.

**PTCC approval**

Proposal submitted to Defence on - Submitted  
Proposal submitted to BSNL on - Submitted  
Proposal submitted to Railways on - Submitted  
Current status: Pending at Director PTCC (Induce Voltage calculation)

**Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on - Submitted  
Current Status: NOC for Defense received

**7. LILO of one circuit of Biswanath Chariyalli (PG) ) – Itanagar 132kV D/C (Zebra) line at Gohpur (AEGCL)**

Detailed survey Completed.

Length : 17.028 ckm  
Locations : 30 nos.  
Foundation completed : 0  
Tower erected : 0  
Stringing completed : 0  
Scheduled COD : Mar'20  
Anticipated COD : Jul'19

**Constraints where Project Authority requires intervention:nil**

**Status of statutory approvals:**

**Forest**

Details of Tr. Line Falling under Forest:-

Locations : 18 nos.  
Length : 5.1km  
Forest area (ha) : 23.782

Forest proposals submitted on - 31.07.2017(online submission date)

Current status: Stage-I received, Tree Cutting Permission awaited.

**Power line crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 1 | nos. |
| Proposal submitted     | : | 1 | nos. |
| Approval obtained      | : | 1 | nos. |

**Railway crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 1 | nos. |
| Proposal submitted     | : | 1 | nos. |
| Approval obtained      | : | 0 | nos. |

**National Highway Crossing**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 0 | nos. |
| Proposal submitted     | : | 0 | nos. |
| Approval obtained      | : | 0 | nos. |

**River Crossings**

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 0 | nos. |
|------------------------|---|---|------|

**PTCC approval**

Proposal submitted to Defence on - Submitted

Proposal submitted to BSNL on - submitted

Proposal submitted to Railways on - Submitted

Current status: Submitted to PTCC Coordinator, Assam

**Defence/Civil Aviation** Proposal submitted to Defence/Civil Aviation on - submitted

Current Status:

**8. Line bays**

**a) 2 no. 400 kV line bays at Palatana GBPP switchyard for termination of Palatana - Surajmaninagar 400kV D/c line**

|                       |                                |
|-----------------------|--------------------------------|
| Land Acquired:        | Space will be provided by OTPC |
| Civil work completed: | 0                              |
| Equipment supplied:   | 0                              |
| Equipment erection:   | 0                              |
| Scheduled COD         | Jul'20                         |
| Anticipated COD:      | Jul'19                         |

**Constraints/Approval if any:**

**b. 2 no. 132 kV line bays for termination of AGTPP (NEEPCO) – P.K. Bari (TSECL) 132kV D/c line at AGTPP (NEEPCO) Switchyard**

|                       |                                  |
|-----------------------|----------------------------------|
| Land Acquired:        | Space will be provided by NEEPCO |
| Civil work completed: | 85%                              |
| Equipment supplied:   | 91%                              |
| Equipment erection:   | 41%                              |
| Scheduled COD         | Mar'20                           |

Anticipated COD: Jul'19

**c. 2 no. 132 kV line bays for termination of AGTPP (NEEPCO) – P.K. Bari (TSECL) 132kV D/c line at P.K. Bari (TSECL) S/s**

|                       |                                 |
|-----------------------|---------------------------------|
| Land Acquired:        | Space will be provided by TSECL |
| Civil work completed: | 86%                             |
| Equipment supplied:   | 88%                             |
| Equipment erection:   | 3%                              |
| Scheduled COD         | Mar'20                          |
| Anticipated COD:      | Jul'19                          |

**d. 2 nos. 132kV line bays for termination of Biswanath Chariyalli (PG) – Itanagar 132kV D/c (Zebra) line at Itanagar S/s (Ar. Pradesh)**

|                       |                                   |
|-----------------------|-----------------------------------|
| Land Acquired:        | Space will be provided by DoP, AP |
| Civil work completed: | 76%                               |
| Equipment supplied:   | 86%                               |
| Equipment erection:   | 7%                                |
| Scheduled COD         | Mar'20                            |
| Anticipated COD:      | Jul'19                            |

## **(24) Name of transmission project - Additional 400kV Feed to Goa and Additional System for Power Evacuation from Generation Projects pooled at Raigarh (Tamnar) Pool**

### **Background**

### **Scope of transmission project**

1. LILO of one ckt. of Narendra (existing) - Narendra (New) 400kV D/c quad line at Xeldem
2. Xeldem - Mapusa 400kV D/c (quad) line
3. Establishment of 2x500MVA, 400/220kV substation at Xeldem
4. Dharamjaygarh Pool section B - Raigarh (Tamnar) Pool 765kV D/c line

### **General Details**

|                                      |   |                                         |
|--------------------------------------|---|-----------------------------------------|
| Special Purpose Vehicle              | : | Goa-Tamnar Transmission Project Limited |
| Bid Process Coordinator (BPC)        | : | Power Finance Corporation               |
| Estimated Cost (Rs. Crs)             | : | 863                                     |
| Levelised Tariff(Rs. Crs)            | : |                                         |
| Request for Qualification            | : | 01.02.2017                              |
| Request for Proposal                 | : | 01.05.2017                              |
| Letter of Intent                     | : | 30.11.2017                              |
| Transmission Service Agreement (TSA) | : | 28.06.2017                              |
| SPV acquisition                      | : | 14.03.2018                              |
| Transmission License by CERC         | : | 13.07.2018                              |
| Tariff adoption by CERC              | : | 13.07.2018                              |
| Contract Performance Guarantee       | : | 05.01.2018                              |
| Clearance u/s 164                    | : | 29.11.2018                              |
| Execution plan submitted to CEA      | : | 10.07.2018                              |
| NIT issued on                        | : |                                         |
| EPC contract awarded on              | : | 29-12-2017                              |
| Scheduled Date of Completion         | : | Nov'21                                  |
| Anticipated Date of Completion       | : | June'20                                 |

### **Status of progress of transmission project**

SPV acquired by SPTL on 14.03.2018.

## **(25) Name of transmission project - Eastern Region System Strengthening Scheme-VI(ERSS-VI)**

### **Background**

Future demand projection given by Bihar indicates a power demand of about 5600 MW by the year 2016-17. Out of this 2100 MW power demand is in northern part and 3500 MW power demand is in southern part of the state. Regarding power availability, Bihar would have additional share of 2500 MW from Central generation project. Northern part of Bihar has only 2 nos. s/s (Purnea and Muzaffarpur) with total capacity of 1260 MVA as against projected demand of 2100 MW during 2016-17. Keeping in view the load growth requirement by 2016-17, this ISTS scheme has been proposed.

### **Scope of transmission project**

1. Muzaffarpur(PG)- Darbhanga 400 kV D/C line with triple snowbird conductor
2. LILO of Barh –Gorakhpur 400 kV 2xD/C line at Motihari.
3. 2x500 MVA, 400/220 kV Darbhanga GIS with space for future extension
4. 2x500 MVA, 400/132 kV Motihari GIS with space for future extension

### **General Detail**

|                                      |   |                                                                                     |
|--------------------------------------|---|-------------------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : | Darbhangha Motihari Trans. Company Ltd<br>(A subsidiary of Essel Infraprojects Ltd) |
| Bid Process Coordinator              | : | PFCCL                                                                               |
| Estimated Cost (Rs. crs)             | : | 540                                                                                 |
| Request for Qualification            | : | 08.02.2013                                                                          |
| Request for Proposal                 | : | 27.05.2013                                                                          |
| Letter of Intent                     | : | 17.10.2013                                                                          |
| Transmission Service Agreement (TSA) | : | 06.08.2013                                                                          |
| SPV acquisition                      | : | 10.12.2013                                                                          |
| Transmission License by CERC         | : | 30.05.2014                                                                          |
| Tariff adoption by CERC              | : | 20.05.2014                                                                          |
| Contract Performance Guarantee       | : | 05.12.2013                                                                          |
| Clearance u/s 164                    | : | 04.09.2014                                                                          |
| Execution plan submitted to CEA      | : | 16.04.2014                                                                          |
| NIT issued on                        | : |                                                                                     |
| EPC contract awarded on              | : | 04.03.2014                                                                          |
| Scheduled Date of Completion         | : | (Darbhanga Element – Jun 16, Motihari- Aug 16)                                      |
| Anticipated Date of Completion       | : | Mar-17/Aug-17                                                                       |
| Actual Date of completion            | : | August, 2017                                                                        |

### **Status of progress of transmission project**

#### **1. Muzaffarpur (PG) - Darbhanga 400 kV D/c line with triple snowbird conductor**

- Length: 125.6 ckm
- Locations: 178

Transmission Line successfully Charged and Presently in Commercial Operation from **Apr 2017**.

#### **2. LILO of Barh –Gorakhpur 400 kV 2xD/c line at Motihari**

- Length: 151.558 ckm
- Locations: 210 nos.

Transmission Line successfully Charged and Presently in Commercial Operation from **Aug 2017**.

**3. 2x500 MVA, 400/220 kV Darbhanga GIS with space for future extension**

GIS Sub-station successfully charged and presently in commercial operation from **Apr 2017**.

**4. 2x200 MVA, 400/132 kV Motihari GIS with space for future extension.**

400 kV GIS Substation charged and presently in commercial operation from **31st July 2017**.

**Transmission Project commissioned on August 2017.**

## **(26) Name of transmission project - Northern Region System Strengthening Scheme(NRSS) - XXXI (Part-B)**

### **Background**

A 2x315 MVA 400/220kV substation of PGCIL is existing at Amritsar and connected to Jalandhar through a 400 kV S/C line. To meet growing power demand at Amritsar a 500MVA 400/220 kV ICT is under implementation. To augment supply of power to Amritsar S/s 400kV connectivity to Parbati Pooling station and Makhu (PSTCL substation) is under implementation. However, the power supply to Amritsar area would be mainly through Jalandhar 400kV substation as during winters the generation of hydro projects would reduce to very low level as well as in case of low generation at Talwandi Saboo TPS, Makhu S/s may also draw power from Amritsar. Hence there is a necessity that power supply arrangement to Amritsar S/s is augmented. A HVDC station at Kurukshetra is being established for supply of power from pit head generating station of Chhattisgarh. Accordingly, for augmenting power supply to Amritsar S/s, this transmission scheme has been proposed under NRSS-XXXI – Part-B.

### **Scope of transmission project**

1. Kurukshetra – Malerkotla 400 kV D/C line
2. Malerkotla – Amritsar 400 kV D/C line.

### **General Details**

|                                      |   |                                                                                    |
|--------------------------------------|---|------------------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : | NRSS XXXI (B) Transmission Limited.<br>(A subsidiary of Essel Infra projects Ltd.) |
| Bid Process Coordinator (BPC)        | : | RECTPCL                                                                            |
| Estimated Cost (Rs. Crs)             | : | 550                                                                                |
| Request for Qualification            | : | 31.07.2013                                                                         |
| Request for Proposal                 | : | 09.12.2013                                                                         |
| Letter of Intent                     | : | 26.02.2014                                                                         |
| Transmission Service Agreement (TSA) | : | 02.01.2014                                                                         |
| SPV acquisition                      | : | 12.05.2014                                                                         |
| Transmission License by CERC         | : | 25.08.2014                                                                         |
| Tariff adoption by CERC              | : | 07.08.2014                                                                         |
| Contract Performance Guarantee       | : | 18.03.2014                                                                         |
| Clearance u/s 164                    | : | 15.10.2014                                                                         |
| Execution plan submitted to CEA      | : | 01.08.2014                                                                         |
| NIT issued on                        | : |                                                                                    |
| EPC contract awarded on              | : | 17.09.2014                                                                         |
| Scheduled Date of Completion         | : | Sep 2016                                                                           |
| Actual Date of Completion            | : | April, 2017                                                                        |

### **Status of progress of transmission project**

#### **1. Kurukshetra – Malerkotla 400 kV D/C line**

- Length: 278.4 ckm

Under Commercial Operation from **Jan 2017**

## **2. Malerkotla – Amritsar 400 kV D/C line.**

- Length: 151.558 ckm
- Locations: 210 nos.

Under Commercial operation from **Apr 2017**.

**Transmission Project commissioned on April 2017.**

## **(27) Name of transmission project - Development of Additional Inter regional AC link for import into Southern region i.e Warora-Warangal and Chilakaluripeta – Hyderabad – Kurnool 765 kV link**

### **Background**

To facilitate import of 16000 MW power to Southern region by 2018-19 based on the pessimistic scenario of non-availability / delay in commissioning of some of the generation projects in Southern region, this 765 kV additional transmission link has been proposed in case of contingencies including total outage of an entire inter-regional link and other critical regional lines for reliability.

### **Scope of transmission project**

1. Establishment of 765/400 kV substations at Warangal (New) with 2X1500 MVA transformers and 2X240 MVAR bus reactors.

#### **765 kV bay requirement (in Warangal)**

Line bays: 06 No.  
Transformer bays: 02 No.  
Space for future line bays: 06 No.

#### **400 kV bay requirement (in Warangal)**

Line bays: 02 No.  
Transformer bays: 02 No.  
Space for future line bays: 08 No.

2. Warora (Pool) – Warangal (New) 765 kV D/C line with 240 MVAR switchable line reactor at both ends
3. Warangal (New) – Hyderabad 765 kV D/C line with 240 MVAR switchable line reactor at Warangal end of each circuit.
4. Warangal (New) – Warangal (existing) 400 kV (quad) D/C line.
5. Hyderabad- Kurnool 765 kV D/C line with 240 MVAR switchable line reactor at Kurnool end of each circuit.
6. Warangal (New) – Chilakaluripeta 765 kV D/C line with 240 MVAR switchable line reactor at both ends of each circuit.
7. 240 MVAR Switchable Line Reactors with Bays at Warora (Pool) end in each circuit of Warora (Pool)- Rajnandgaon 765kV D/c line with NGR (700 Ohm)

### **General Detail**

|                                      |   |                                                                            |
|--------------------------------------|---|----------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : | Warora Kurnool Transmission Ltd.<br>(A subsidiary of Essel Infraproj. Ltd) |
| Bid Process Coordinator (BPC)        | : | PFCCL                                                                      |
| Estimated Cost (Rs. crs)             | : | 4805                                                                       |
| Request for Qualification            | : | 11.09.2015                                                                 |
| Request for Proposal                 | : | 30.11.2015                                                                 |
| Letter of Intent                     | : | 29.02.2016                                                                 |
| Transmission Service Agreement (TSA) | : | 06.01.2016                                                                 |
| SPV acquisition                      | : | 06.07.2016                                                                 |
| Transmission License by CERC         | : | 29.09.2016                                                                 |
| Tariff adoption by CERC              | : | 30.08.2016                                                                 |
| Contract Performance Guarantee       | : | 01.07.2016                                                                 |

|                                 |   |                                   |
|---------------------------------|---|-----------------------------------|
| Clearance u/s 164               | : | Gazette publication on 10.07.2017 |
| Execution plan submitted to CEA | : | 02.11.2016                        |
| NIT issued on                   | : |                                   |
| EPC contract awarded on         | : | 30.08.2016                        |
| Scheduled Date of Completion    | : | Nov-2019                          |
| Anticipated Date of Completion  | : | Dec-2019                          |

## **Status of progress of transmission project**

### **1. Establishment of 765/400 kV substations at Warangal (New) with 2X1500 MVA transformers and 2X240 MVAR bus reactors.**

|                      |   |                                               |
|----------------------|---|-----------------------------------------------|
| Land Acquired        | : | 100%.                                         |
| Civil work completed | : | 47%                                           |
| Equipment supplied   | : | 60% substation material<br>10 no. of reactors |
| Equipment erection   | : |                                               |
| Scheduled COD        | : | Nov'19                                        |
| Anticipated COD      | : | Dec'19                                        |

**Constraints/Approval if any:nil**

### **2. Warora (Pool) – Warangal (New) 765 kV D/C line with 240 MVAR switchable line reactor at both ends**

|                       |   |             |
|-----------------------|---|-------------|
| Length                | : | 645.742 ckm |
| Locations             | : | 827 nos.    |
| Foundation completed: | : | 773 nos.    |
| Tower erected:        | : | 423 nos.    |
| Stringing completed   | : | 58.6 ckm    |
| Scheduled COD         | : | Nov'19      |
| Anticipated COD       | : | Dec'19      |

#### **Constarints where Project Authority requires intervention:**

- **RoW issue:** Severe RoW issue in the stretch of AP 5B - AP 6, AP 15 – AP 16, AP 27– AP 28 , AP 58, AP 99A – AP 102, AP 89 – AP 90 and AP 116 /8, AP 116/9, AP 116/14, AP 116/17, AP 116/18, AP 118/6, AP 104/4, AP 104/6 and AP 104/7.
- The work execution in 765 kV D/C Warora (Pool) – Warangal (New) Transmission line, under state Maharashtra is stopped completely from 05th Oct 2018 due to farmer agitation demanding higher compensation for the construction of transmission line at their fields. 18 no. of locations are under severe ROW issue:
- **Court Case :** The Office of Tehsildar, Rajura, Distt. - Chandrapur directed WKTL to stop the transmission tower execution work at tower loc. no. 89/8 of 765 kV D/C Warora (Pool) – Warangal (New) Transmission line immediately in terms of stay order, dated 17/10/2018 passed by the Hon'ble High Court Mumbai, Nagpur Bench in the Writ Petition no. 6980/2018 filed by land owner. WKTL have already filed their reply before the Court, however the court has scheduled the matter on 15.01.2019 for hearing.

### Other issues:

- **Work affected in 765 kV D/C Warora – Warangal Transmission line due to Western Coal Fields (WCL) strict objection for traversing WKTL towers through WCL Penganga OC mine area:**

16 nos. tower location of transmission lines are coming in WCL Penganga OC mine area and WCL has requested for diversion of same. Out of these 16 locations, 14 no. of foundations and 06 no. tower ereactions have been completed. A meeting was held in CEA in this regard with officers of WCL and Ministry of Coal, but the issue could not be resolved. This issue was also discussed during the review meeting called by the Joint Secretary, Ministry of Power (GoI) in presence of the Representatives of WCL.

- **Work affected in 765 kV D/C Warora – Warangal Transmission line due to Singrenni Collieries Company Limited (SCCL) strict objection for traversing towers through Prof. Jayashankar Open Cast Project area:**

04 nos. tower location of transmission lines are coming in Prof. Jayashankar Open Cast Project and SCCL has requested for diversion of same. A meeting was held in CEA in this regard with officers of SCCL and Ministry of Coal, but the issue could not be resolved. This issue was also discussed during the review meeting called by the Joint Secretary, Ministry of Power (GoI) on 04.01.2019 in presence of the Representative of SCCL.

### Status of statutory approvals:

#### Forest

Details of Tr. Line Falling under Forest:-

|                               |                                                                                                                                                                                                        |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Locations                     | : 22                                                                                                                                                                                                   |
| Length                        | : 10.057 Kms                                                                                                                                                                                           |
| Forest area affected (ha)     | : 19.793 ha (2.954 Kms) in Maharastra +<br>47.592 ha (7.103 Kms) in Telangana                                                                                                                          |
| Forest proposals submitted on | : Maha – 4th Aug 17, Telangana – 23 Aug 17                                                                                                                                                             |
| Current status                | : <b>Maharashtra</b> – Stage I received on 05.02.2018<br>.<br><b>Telangana</b> - Stage – I received on 13 <sup>th</sup> Dec 2018 and communicated by PCCF Office to respective DFO on 24.12.2018.<br>. |

#### Wildlife Clearanace

Details of Tr. Line Falling under Wildlife:-

|                               |                                                                                    |
|-------------------------------|------------------------------------------------------------------------------------|
| Locations                     | : 01 No.                                                                           |
| Length                        | : 0.465 Kms                                                                        |
| Forest area affected (ha)     | : 3.1142 ha (0.465 Kms) in Telangana                                               |
| Forest proposals submitted on | : <b>Telangana</b> – 26th Feb 18                                                   |
| Current status                | : Proposal forwarded by State Government to Member Secretary (NBWL) on 20.11.2018. |

Proposal forwarded to NTCA for their recommendation and MoEF&CC asked State Govt. to submit SBWL MoM

#### **Power line crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 27 nos. |       |
| Proposal submitted     | : | 27 nos. | Date: |
| Approval obtained      | : | 20 nos. | Date: |

#### **Railway crossing**

|                        |   |        |       |
|------------------------|---|--------|-------|
| Total no. of crossings | : | 5 nos. |       |
| Proposal submitted     | : | 5 nos. | Date: |
| Approval obtained      | : | 4 nos. | Date: |

#### **National Highway Crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 06 nos. |       |
| Proposal submitted     | : | 06 nos. | Date: |
| Approval obtained      | : | nos.    | Date: |

#### **State Highway Crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 04 nos. |       |
| Proposal submitted     | : | 04 nos. | Date: |
| Approval obtained      | : | -- nos. | Date: |

#### **River Crossings**

|                        |   |       |         |
|------------------------|---|-------|---------|
| Total no. of crossings | : | 1 no. | (Major) |
| Proposal submitted     | : | nos.  | Date:   |
| Approval obtained      | : | nos.  | Date:   |

#### **PTCC approval**

Proposal submitted to Defence on :  
 Proposal submitted to BSNL on :  
 Proposal submitted to Railways on :  
 Current status:

#### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on : Civil & Defence proposal submitted

Current Status:

### **3. Warangal (New) – Hyderabad 765 kV D/C line with 240 MVAR switchable line reactor at Warangal end of each circuit.**

|                      |   |             |
|----------------------|---|-------------|
| Length               | : | 265.218 ckm |
| Locations            | : | 344 nos.    |
| Foundation completed | : | 312 nos.    |
| Tower erected        | : | 247 nos.    |
| Stringing completed  | : |             |
| Scheduled COD        | : | Nov'19      |
| Anticipated COD      | : | Dec'19      |

## Constraints where Project Authority requires intervention:

- **RoW issue:**

In the stretch of AP 10 - AP 11, AP 34 - AP 35, AP 37- AP 38, AP 41- AP 42. AP 46/0, AP 54/2, AP 17/3 and AP 21/6 Further at location nos. 47/2 & 47/3, locals have removed the stubs by using JCB.

**Court Case:**

- Land Owner of location no. 2/6 of 765 kV D/C Warangal – Hyderabad Line, has approached Hon'ble High Court of Telangana. Hon'ble High Court has granted the stay on work. Further on hearing held on 07th June 2018, the Hon'ble Court adjourned and as on date the matter is still pending for scrutiny. In the present situation, the work is at stand still at this location effectively from 16th Mar 2018.
- Land owner for the stretch between the location no. 30 to 31 of 765 kV D/C Warangal – Hyderabad has approached the District Court (Nalgonda) to accord permanent injunction. On the hearing held on 14.03.2019, the Court scheduled next date of hearing on 01.05.2019 in this matter. In such situation, the work is at stand still at this location effectively from 20<sup>th</sup> Mar 2018.

## Status of statutory approvals:

**Forest : Nil**

Details of Tr. Line Falling under Forest:- Locations: nos. Length:  
Forest area(ha) : Nil  
Forest proposals submitted on .....  
Current status:

**Power line crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 15 nos. |       |
| Proposal submitted     | : | 15 nos. | Date: |
| Approval obtained      | : | 5 nos.  | Date: |

**Railway crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 03 nos. |       |
| Proposal submitted     | : | 03 nos. | Date: |
| Approval obtained      | : | 02 nos. | Date: |

**National Highway Crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 01 nos. |       |
| Proposal submitted     | : | 01 nos. | Date: |
| Approval obtained      | : | nos.    | Date: |

**State Highway Crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 02 nos. |       |
| Proposal submitted     | : | 02 nos. | Date: |
| Approval obtained      | : | -- nos. | Date: |

**River Crossings**

|                        |   |     |  |
|------------------------|---|-----|--|
| Total no. of crossings | : | Nil |  |
|------------------------|---|-----|--|

**PTCC approval**

Proposal submitted to Defence on .....  
Proposal submitted to BSNL on .....  
Proposal submitted to Railways on .....  
Current status:

#### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation : Defence & Civil aviation proposal submitted

Current Status: Civil Aviation approval obtained.

#### **4. Warangal (New) – Warangal (existing) 400 kV (quad) D/C line**

- Length : 94.94 ckm
- Locations : 130 nos.
- Foundation completed: 09 no's
- Tower erected :
- Stringing completed :
- Scheduled COD : Nov'19
- Anticipated COD : Feb'20

**Constraints where Project Authority requires intervention:nil**

#### **Status of statutory approvals:**

##### **Forest - Nil**

Details of Tr. Line Falling under Forest:- Locations: nos. Length:

Forest area affected (ha) : Nil

Forest proposals submitted on .....

Current status:

##### **Power line crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 04 nos. |       |
| Proposal submitted     | : | nos.    | Date: |
| Approval obtained      | : | nos.    | Date: |

##### **Railway crossing**

|                        |   |        |       |
|------------------------|---|--------|-------|
| Total no. of crossings | : | 01 no. |       |
| Proposal submitted     | : | nos.   | Date: |
| Approval obtained      | : | nos.   | Date: |

##### **National Highway Crossing**

|                        |   |        |       |
|------------------------|---|--------|-------|
| Total no. of crossings | : | 01 no. |       |
| Proposal submitted     | : | nos.   | Date: |
| Approval obtained      | : | nos.   | Date: |

##### **River Crossings**

|                        |   |     |  |
|------------------------|---|-----|--|
| Total no. of crossings | : | Nil |  |
|------------------------|---|-----|--|

##### **PTCC approval**

Proposal submitted to Defence on .....

Proposal submitted to BSNL on .....

Proposal submitted to Railways on .....

Current status:

**Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on.....

Current Status:

**5. Hyderabad- Kurnool 765 kV D/C line with 240 MVAR switchable line reactor at Kurnool end of each circuit**

Length : 331.58 ckm  
 Locations : 422 nos.  
 Foundation completed : 337 nos.  
 Tower erected : 183 nos.  
 Stringing completed :  
 Scheduled COD : Nov'19  
 Anticipated COD : Feb'20

**Constraints where Project Authority requires intervention:**

Work hampered due to severe RoW issue in the stretch of AP 27 – AP 29, AP 60A– AP 60B and AP 66 – AP 67.

**Status of statutory approvals:**

**Forest - Nil**

Details of Tr. Line Falling under Forest:- Locations: nos. Length:

Forest area affected (ha) : Nil

Forest proposals submitted on .....

Current status:

**Power line crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 21 nos. |       |
| Proposal submitted     | : | 21 nos. | Date: |
| Approval obtained      | : | 05 nos. | Date: |

**Railway crossing**

|                        |   |      |       |
|------------------------|---|------|-------|
| Total no. of crossings | : | Nil  |       |
| Proposal submitted     | : | nos. | Date: |
| Approval obtained      | : | nos. | Date: |

**National Highway Crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 01 nos. |       |
| Proposal submitted     | : | 01 nos. | Date: |
| Approval obtained      | : | nos.    | Date: |

**State Highway Crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 03 nos. |       |
| Proposal submitted     | : | 03 nos. | Date: |
| Approval obtained      | : | -- nos. | Date: |

**River Crossings**

|                        |   |         |         |
|------------------------|---|---------|---------|
| Total no. of crossings | : | 01 nos. | (Major) |
| Proposal submitted     | : | nos.    | Date:   |
| Approval obtained      | : | nos.    | Date:   |

**PTCC approval**

Proposal submitted to Defence on .....  
Proposal submitted to BSNL on .....  
Proposal submitted to Railways on .....  
Current status:

#### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation: Defence & civil aviation proposal submitted

Current Status: Civil aviation approval obtained

#### **6. Warangal (New) – Chilakaluripeta 765 kV D/C line with 240 MVAR switchable line reactor at both ends of each circuit**

Length: 394.33 ckm  
Locations: 565 nos.  
Foundation completed: 446 nos.  
Tower erected: 341 nos.  
Stringing completed:  
Scheduled COD: Nov'19  
Anticipated COD: Feb'20

#### **Constarints where Project Authority requires intervention:nil**

Severe RoW issue existing in the stretch of AP 10 – AP 11, AP 14- AP 15, AP 25 – AP 28, AP 52- AP 53, AP 55 – AP 56, AP 76 – AP 78, AP 84- AP 85 & AP 89 – AP 90.

#### **Court Case:**

- 04 no. of tower locations of 765 kV D/C Warangal (New) – Chilakaluripeta Transmission line has been traversing though the proposed land area of M/s Emami Cement Ltd., out of which the 04 no. of foundations and 03 no's of erections are already completed. M/s Emami Cement Ltd. moved to High Court of Hyderabad for seeking order to remove WKTL transmission towers along with direction to re-route the transmission line.

At present this matter is under consideration of Hon'ble High Court, Hyderabad. The work at the above said locations including nearby locations is stopped till listing of this matter and further orders passed by the Hon'ble Court.

#### **Status of statutory approvals:**

##### **Forest**

Details of Tr. Line Falling under Forest:-

Locations : 07nos.  
Length:Forest area affected (ha) : 18.442 ha (2.75 Kms) in Andhra pradesh  
Forest proposals submitted on : 23.08.2017  
Current status : Stage –I forest approval granted on 28.11.18.  
Stage I communicated by State Govt. to PCCF office on 24.12.2018.

##### **Power line crossing**

Total no. of crossings : 29 nos.  
Proposal submitted : 29 nos. Date:  
Approval obtained : 15 nos. Date:

##### **Railway crossing**

Total no. of crossings : 03 nos.  
Proposal submitted : 03 nos. Date:

|                                  |   |         |       |
|----------------------------------|---|---------|-------|
| Approval obtained                | : | nos.    | Date: |
| <b>National Highway Crossing</b> |   |         |       |
| Total no. of crossings           | : | 03 no.  |       |
| Proposal submitted               | : | 02 nos. | Date: |
| Approval obtained                | : | nos.    | Date: |

#### **State Highway Crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 03 no.  |       |
| Proposal submitted     | : | 03 nos. | Date: |
| Approval obtained      | : | -- nos. | Date: |

#### **River Crossings**

|                        |   |        |         |
|------------------------|---|--------|---------|
| Total no. of crossings | : | 01 no. | (Major) |
| Proposal submitted     | : | nos.   | Date:   |
| Approval obtained      | : | nos.   | Date:   |

#### **PTCC approval**

|                                   |   |  |
|-----------------------------------|---|--|
| Proposal submitted to Defence on  | : |  |
| Proposal submitted to BSNL on     | : |  |
| Proposal submitted to Railways on | : |  |
| Current status:                   |   |  |

#### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on: Defence & civil aviation Proposal submitted

Current Status : Civil aviation approval obtained.

### **7. 240 MVAR Switchable Line Reactors with Bays at Warora (Pool) end in each circuit of Warora (Pool)- Rajnandgaon 765kV D/c line with NGR (700 Ohm)**

- Land Acquired : NA
- Civil work completed : 100%.
- Equipment supplied : 100%
- Equipment erection : 100%
- Scheduled COD : Nov'18
- Actual COD : Dec'18

*\*Under deemed commercial operation w.e.f. 08.12.2018.*

*The charging and power flow started from 24.03.19 (CKT I) and 27.03.19 (CKT II) onwards.*

## **(28) Name of transmission project - System strengthening in northern region (NRSS XXXVI) along with LILO of Sikar-Neemrana 400 kV D/C line at Babai (RRVNL)**

### **Background**

400 kV AC link between Rishikesh and Koteshwar shall improve reliability. It shall improve the power supply to Uttarakhand and also obviate the power transfer constraint on 400 kV Roorkee -Muzaffarnagar line during low hydro generation condition. This link would provide additional outlet from Tehri/ Koteshwar generation complex and independent feed for providing reliable and quality power supply to Rishikesh area.

Babai 400/220 kV substation of RRVNL is under construction and the substation is associated with power evacuation system of Suratgarh Super Critical TPS (2x660MW) and shall be connected to Suratgarh through 400kV D/c line. The 400 kV Sikar - Neemrana D/C line is crossing Babai S/s at a distance of approx. 1 Km. The proposal of LILO of one ckt of Sikar-Neemrana 400kV line at Babai would be helpful for enhancing the reliability of power supply. The proposed LILO would increase the flexibility in this area.

### **Scope of Transmission project**

1. Koteshwar Pooling Station - Rishikesh 400kV D/C (HTLS) line – 83.152 ckm.
2. 2 Nos. of bays at 400 kV Rishikesh S/S
3. LILO of one ckt of 400 kV D/c Sikar (PG)-Neemrana (PG) line at Babai- 2.922 ckm.
4. Babai (RRVNL) – Bhiwani (PG) D/C line – 248.61 ckm.
5. 4 Nos. of bays at 400 kV Babai (RRVNL) substation

### **General Details**

|                                      |   |                              |
|--------------------------------------|---|------------------------------|
| Special Purpose Vehicle (SPV)        | : | NRSS XXXVI Trans.Ltd (ESSEL) |
| Bid Process Coordinator (BPC)        | : | RECTPCL                      |
| Estimated Cost (Rs. Crs.)            | : | 437                          |
| Request for Qualification            | : | 25.08.2015                   |
| Request for Proposal                 | : | 12.11.2015                   |
| Date of Letter of Intent             | : | 29.03.2016                   |
| Transmission Service Agreement (TSA) | : | 13.01.2016                   |
| SPV acquisition                      | : | 22.08.2016                   |
| Transmission License by CERC         | : | 07.12.2016                   |
| Tariff adoption by CERC              | : | 14.12.2016                   |
| Contract Performance Guarantee       | : | 11.08.2016                   |
| Clearance u/s 164                    | : | 01.11.2017                   |
| Execution plan submitted to CEA      | : | 20.12.2016                   |
| NIT issued on                        | : |                              |
| EPC awarded on                       | : | 20.01.2017                   |
| Scheduled Date of Completion         | : | June 2019/Dec 2019           |
| Anticipated Date of Completion       | : |                              |

## Status of progress of transmission project

### 1. Koteswar Pooling Station - Rishikesh 400kV D/C (HTLS) line

The route alignment & detailed survey is completed.

Tower Package is awarded. Check survey is under progress.

|                      |           |
|----------------------|-----------|
| Length               | : 81 CKm  |
| Locations            | : 106 nos |
| Foundation completed | : 16 nos  |
| Tower erected        | :         |
| Stringing completed  | :         |
| Scheduled COD        | : Dec'19  |
| Anticipated COD      | :         |

#### Constraints where Project Authority requires intervention:

- **NOC from Indian Drugs and Pharmaceuticals Limited (IDPL), Rishikesh is pending:**

NOC is yet to be issued from IDPL, Rishikesh and forest diversion proposal of 400kV D/C Rishikesh- Koteswar line is yet to be initiated. IDPL informed that Government of India has taken a decision to close down Indian Drugs and Pharmaceuticals Limited (IDPL). Accordingly, the Deptt. of Pharmaceuticals has decided to transfer back the IDPL Rishikesh land to Govt. of Uttarakhand. In such a situation, it was advised to obtain first NOC from Govt. of Uttarakhand, based on that IDPL may issue NOC to NRSS XXXVI Tr. Ltd.

Matter was discussed in meeting held in MOP on 29.03.19 and IDPL agreed to process the case of NOC.

- **Route diversion of 400 kV D/C Rishikesh- Koteswar Line at the instruction of DFO (Tehri) letter dated 21st Dec 2018:**

DFO Tehri through letter dated 21st Dec 2018 informed that Central Government plantation Project under "Namami Gangey Scheme" is coming under NRSS XXXVI line route and will be adversely affected from NRSS XXXVI transmission line construction. Accordingly, it was directed to divert from existing route. NRSS XXXVI Tr. Ltd have submitted the revised route avoiding "**Namami Gangey Scheme Plantation**" to forest authorities on 13.03.19, which is still under their review and yet to be approved by DFO Tehri Garhwal.

#### Severe RoW issues:

Severe RoW issues are existing at loc. No. 1/0, 2/0, 3/0, 4/0, 13/0, 14/0, 14/1, 15/0, 16/0, 42/0, 43/0, 44/0, 48/0, 48/1 and 49/0 .

#### Status of statutory approvals:

**Forest**

Details of Tr. Line Falling under Forest:- Locations:      nos.                      Length: 22.2 Km.

Forest area affected (ha) : 96.60 ha

Forest proposals submitted on 24th Oct 2017.

**Current status:** only due to specific conditions imposed by Forest Deptt., also which are beyond the Forest Conservation Amendment (Rules), 2014, the Forest diversion proposal of 400 kV D/C Rishikesh – Koteshwar line is yet to be initiated.

**Power line crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 07 nos. |       |
| Proposal submitted     | : | 06 nos. | Date: |
| Approval obtained      | : | 04 nos. | Date: |

**Railway crossing**

|                        |   |        |       |
|------------------------|---|--------|-------|
| Total no. of crossings | : | 01 no. |       |
| Proposal submitted     | : | nos.   | Date: |
| Approval obtained      | : | nos.   | Date: |

**National Highway Crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 05 nos. |       |
| Proposal submitted     | : | nos.    | Date: |
| Approval obtained      | : | nos.    | Date: |

**State Highway Crossing**

|                        |   |         |       |
|------------------------|---|---------|-------|
| Total no. of crossings | : | 01 nos. |       |
| Proposal submitted     | : | nos.    | Date: |
| Approval obtained      | : | nos.    | Date: |

**River Crossings**

|                        |   |      |       |
|------------------------|---|------|-------|
| Total no. of crossings | : | Nil  |       |
| Proposal submitted     | : | nos. | Date: |
| Approval obtained      | : | nos. | Date: |

**PTCC approval**

Proposal submitted to Defence on :

Proposal submitted to BSNL on :

Proposal submitted to Railways on :

Current status:

**Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on :

Current Status:

**2. 2 Nos. 400 kV bays at Rishikesh S/S**

|                      |   |        |
|----------------------|---|--------|
| Land Acquired        | : | NA     |
| Civil work completed | : |        |
| Equipment supplied   | : |        |
| Equipment erection   | : |        |
| Scheduled COD        | : | Dec'19 |
| Anticipated COD      | : |        |

**Constarints where Project Authority requires intervention:nil.**

**3. LILO of one ckt of 400 kV D/c Sikar (PG) – Neemrana (PG) line at Babai**

Length: 2.922 CKm

Locations: 06 nos.

**Deemed COD Oct'17**

**Deemed COD of the Element is declared on 30th Oct 2017 due to non-readiness of RVPN System. Element charged on 16 Feb 2018 after readiness of RVPN System.**

**4. Babai (RRVNL) – Bhiwani (PG) D/C line**

The route alignment & detailed survey is completed.

Tower Package is awarded.

Length : 221 CKm

Locations : 299 nos.

Foundation completed : 265 nos.

Tower erected: : 215 nos

Stringing completed :

Scheduled COD : Jun'19

Anticipated COD : Jul'19

**Constraints where Project Authority requires intervention:**

**Severe RoW issues:**

Severe RoW issues are existing at loc. No. 52/1, 52/3, 53/0, 54/0, 54/1, 54/2 & 54A/0 of Tehsil Dadri and loc. No. 17/0 & 18/0 of Tehsil Khetri.

**Status of statutory approvals:**

**Forest**

Details of Tr. Line Falling under Forest:- 3.37 Km

Locations: 07 nos. (Rajsthan)

Length:

Forest area(ha) : 12.90 Ha (2.80 Kms) Rajsthan + 3.46 Ha (0.57 Kms) Haryana

Forest proposals submitted on : 15-05-2017 for Haryana and on 11.08.2017 for Rajasthan.

Current status: Haryana Proposal- Stage I approval received on 27 Mar 2018.

Rajashthan Proosal - Stage I approval received on 6th Jul 2018.

**Wildlife Clearance**

Details of Tr. Line Falling under Wildlife :-

Locations:

Length:

Wildlife area(ha) : 7.452 Ha (2.80 Kms) Khetri Bansyal Conversion Reserve

Wildlife proposals submitted on : 16-02-2018

Current status: Proposal recommended by NBWL and currently recommendations forwarded to State Govt. (Rajasthan).

**Power line crossing**

Total no. of crossings : 20 nos.

Proposal submitted : 20 nos. Date:

Approval obtained : 20 nos. Date:

**Railway crossing**

Total no. of crossings : 01 no.  
Proposal submitted : 01 nos. Date:  
Approval obtained : 01 nos. Date:

**National Highway Crossing**

Total no. of crossings : 01 nos.  
Proposal submitted : 01 nos. Date:  
Approval obtained : 01 nos. Date:

**State Highway Crossing**

Total no. of crossings : 05 nos.  
Proposal submitted : 05 nos. Date:  
Approval obtained : 05 nos. Date:

**Canal Crossings (Minor)**

Total no. of crossings : 14 nos.  
Proposal submitted : 14 nos. Date:  
Approval obtained : 14 nos. Date:

**PTCC approval**

Proposal submitted to Defence on .....  
Proposal submitted to BSNL on .....  
Proposal submitted to Railways on .....  
Current status:

**Defence/Civil Aviation**

Proposal submitted : 13.03.2018  
Current Status : Civil Aviation approval received on 31.05.18  
Approval from Defence received on 06.06.18

**5. 2 Nos. 400 kV bays at Babai (RRVPNL) substation for LILO Line**

Land Acquired : 100%  
Civil work completed : 100%  
Equipment supplied : 100%  
Equipment erection : 100%  
Scheduled COD : Dec'16  
Deemed COD : 30 Oct'17

**Deemed COD of the Element is declared on 30th Oct 2017 due to non-readiness of RVPN System. Element charged on 16 Feb 2018 after readiness of RVPN System.**

**6. 2 Nos. 400 kV bays at Babai (RRVPNL) substation for Bhiwani Line**

Land Acquired: 100%  
Civil work completed: 100%  
Equipment supplied: 84%  
Equipment erection: 23%  
Scheduled COD Jun'19

Anticipated COD:  
**Constraints/Approval if any:**

Shut down required to complete work of 02 no. of bays at 400 kV Babai (RRVPNL) S/s for 400 kV D/C Babai- Bhiwani transmission Line. RRVPNL responded that shut down application will be considered only after all work completion of M/s A2Z infra at 400 kV Babai S/s.

## **(29) Name of Transmission Project - Additional system strengthening for Sipat STPS**

### **Background**

To enhance redundancy in Sipat STPS power evacuation system, this transmission scheme has been evolved.

### **Scope of transmission project**

1. Sipat – Bilaspur Pooling Station 765 kV 3<sup>rd</sup> S/C line
2. Bilaspur Pooling Station - Rajanandgaon 765 kV D/C line

### **General Detail**

|                                      |   |                                                                        |
|--------------------------------------|---|------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : | Sipat Transmission Ltd<br>(A subsidiary of Adani transmission Limited) |
| Bid Process Coordinator (BPC)        | : | Power Finance Corporation                                              |
| Estimated Cost (Rs. crs)             | : | 867                                                                    |
| Request for Qualification            | : | 01.01.2015                                                             |
| Request for Proposal                 | : | 07.04.2015                                                             |
| Letter of Intent                     | : | 28.07.2015                                                             |
| Transmission Service Agreement (TSA) | : | 24.06.2015                                                             |
| SPV acquisition                      | : | 23.11.2015                                                             |
| Transmission License by CERC         | : | 07.03.2016                                                             |
| Tariff adoption by CERC              | : | 28.01.2016                                                             |
| Contract Performance Guarantee       | : | 30.10.2015                                                             |
| Clearance u/s 164                    | : | 03.08.2016                                                             |
| Execution plan submitted to CEA      | : | 21.03.2016                                                             |
| NIT issued on                        | : |                                                                        |
| EPC contract awarded on              | : |                                                                        |
| Scheduled Date of Completion         | : | 22.03.2019                                                             |
| Actual Date of Completion            | : | May'18 (works completed),<br>Mar'19 (Commissioned)                     |

### **Status of progress of transmission project**

#### **1. Sipat STPS - Bilaspur 765 kV S/C (Q) line**

Length : 24.22 ckm  
Locations : 73 nos

**Transmission line commissioned in Aug'18.**

#### **2. Bilaspur - Rajnandgaon 765 kV D/C (hexa) line**

Length : 324.07 ckm  
Locations : 428 nos

**Transmission line commissioned in Mar'19.**

#### **3. 765 kV Bay at Sipat s/s**

**Commissioned Aug'18**

**Connection agreement signed on 28.06.2018. Project is ready for commissioning.**

## **(30) Name of transmission project - Additional system strengthening for Chhattisgarh (B)**

### **Background**

The transmission corridor covered under present project has been evolved to provide reliable evacuation of power from various IPPs coming up in Chhattisgarh.

### **Scope of transmission project**

1. Raipur(pool) – Rajnandgaon 765 kV D/C line
2. Rajnandgaon – Pooling station near warora 765 kV D/C line
3. Establishment of pooling station near Rajnandgaon

#### **765 kV**

- Line bays 6 nos
- Bus reactor 3x110 MVar
- Bus reactor bay 1 no.
- Line reactors 7x110 MVar(1 unit spare, switchable for warora line)
- Space for 765kV line bays 4 nos
- Space for 765 kV ICT bays 3 nos

#### **400 kV**

- Space for 400 kV ICT bays 3 nos
- Space for 400 kV line bays 4 nos

### **General Details**

|                                     |   |                                                                                       |
|-------------------------------------|---|---------------------------------------------------------------------------------------|
| Special Purpose Vehicle(SPV)        | : | Raipur- Rajnandgaon Warora Trans. Ltd<br>(A subsidiary of Adani transmission Limited) |
| Bid Process Coordinator(BPC)        | : | Power Finance Corporation                                                             |
| Estimated Cost (Rs. Crs)            | : | 823 Crs                                                                               |
| Request for Qualification           | : | 01.01.2015                                                                            |
| Request for Proposal                | : | 13.04.2015                                                                            |
| Letter of Intent                    | : | 28.07.2015                                                                            |
| Transmission Service Agreement(TSA) | : | 24.06.2015                                                                            |
| SPV acquisition                     | : | 23.11.2015                                                                            |
| Transmission License by CERC        | : | 29.02.2016                                                                            |
| Tariff adoption by CERC             | : | 29.01.2016                                                                            |
| Contract Performance Guarantee      | : | 30.10.2015                                                                            |
| Clearance u/s 164                   | : | 15.06.2016                                                                            |
| Execution plan submitted to CEA     | : | 21.03.2016                                                                            |
| NIT issued on                       | : |                                                                                       |
| EPC contract awarded on             | : |                                                                                       |
| Scheduled Date of Completion        | : | 22.11.2018                                                                            |
| Anticipated Date of Completion      | : | Mar'19 (works completed)                                                              |

### **Status of progress of transmission project**

#### **1. Raipur - Rajnandgaon 765 kV D/C (hexa) line**

- Length: 79.56 ckm
- Locations: 104 nos

**Transmission line commissioned in Mar'19.**

**2. Rajnandgaon - Warora 765 kV D/C (hexa) line**

- Length: 532 ckm
- Locations: 688 nos

**Transmission line commissioned in Mar'19.**

**3. 765 kV Rajnandgaon switching station**

**Commissioned in Mar'19.**

## **(31) Name of transmission project - System strengthening for IPPs in Chhattisgarh and other generation projects in western region**

### **Background**

The immediate evacuation of Vindhyachal STPP- IV & V consists of Vindhyachal-IV - Vindhyachal Pool station 400 kV D/C (Quad) line. NTPC requested to provide additional outlet from Vindhyachal-IV generation project in order to increase the reliability of power evacuation system for Vindhyachal STPP-IV & V project. With 765 kV and 400 kV interconnection there would be more flexibility in operation as well as utilization of the 765/400 kV transformation capacity.

### **Scope of transmission project**

1. 400 kV interconnection at Gwalior 765/400 kV s/s
  - (i) Gwalior-Morena 400 kV D/C (Q) line
  - (ii) 2x315 MVA, 400/220 kV substation at Morena
2. Additional evacuation line from Vindhyachal-IV & V STPP (3x500 MW)
  - (i) Vindhyachal STPS - IV & V – Vindhyachal pool 400 kV D/C (Q) line
  - (ii) 400 kV bays (2 nos.) at Vindhyachal STPP switchyard
3. Additional system strengthening scheme for Chhattisgarh IPP's (Part-A)
  - (i) Sasan UMPP – Vindhyachal Pooling Station 765 kV S/C (Q) line
  - (ii) Raigarh (Kotra) – Champa (Pool) 765 kV S/C (Q) line
  - (iii) Champa (Pool) – Dharamjaygarh 765 kV S/C (Q) line
  - (iv) LILO of one ckt of Aurangabad – Padghe 765 kV D/C (hexa) line at Pune
  - (v) 765 kV bays at Sasan UMPP

### **General Detail**

|                                     |   |                                                                                  |
|-------------------------------------|---|----------------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)       | : | Chhattisgarh-WR Transmission Ltd<br>(A subsidiary of Adani Transmission Limited) |
| Bid Process Coordinator (BPC)       | : | Power Finance Corporation                                                        |
| Estimated Cost (Rs. crs)            | : | 823                                                                              |
| Request for Qualification           | : | 29.12.2014                                                                       |
| Request for Proposal                | : | 13.04.2015                                                                       |
| Letter of Intent                    | : | 28.07.2015                                                                       |
| Transmission Service Agreement(TSA) | : | 24.06.2015                                                                       |
| SPV acquisition                     | : | 23.11.2015                                                                       |
| Transmission License by CERC        | : | 29.02.2016                                                                       |
| Tariff adoption by CERC             | : | 28.01.2016                                                                       |
| Contract Performance Guarantee      | : | 30.10.2015                                                                       |
| Clearance u/s 164                   | : | 25.10.2016                                                                       |
| Execution plan to CEA               | : | 21.03.2016                                                                       |
| NIT issued on                       | : |                                                                                  |
| EPC contract awarded on             | : |                                                                                  |
| Scheduled Date of Completion        | : | 22.03.2019                                                                       |
| Anticipated Date of Completion      | : | Jun'19                                                                           |

## Status of progress of transmission project

### 1. 400 kV interconnection at Gwalior 765/400 kV s/s

#### (i) Gwalior - Morena 400 kV D/C (Q) line

Length: 95.6 ckm  
Locations: 145 nos

Transmission line commissioned in **May'18**.

#### (ii) 2x315 MVA, 400/220 kV Morena substation

Substation commissioned in **May'18**.

### 2. Additional evacuation line from Vindhyachal-IV & V STPP (3x500 MW)

#### (i) Vindhyachal STPS - IV & V – Vindhyachal pool 400 kV D/C (Q) line

Length: 54.62 ckm  
Locations: 87 nos

Line commissioned in **Mar'18**.

#### (ii) 400 kV bays (2 nos.) at Vindhyachal STPP switchyard

Commissioned in **Mar'18**.

### 3. Additional system strengthening scheme for Chhattisgarh IPP's (Part-A)

#### (i) Sasan UMPP – Vindhyachal Pooling Station 765 kV S/C (Q) line

Length: 5.892 ckm  
Locations: 22 nos

Line commissioned in **Apr'18**.

#### (ii) Raigarh (Kotra) – Champa (Pool) 765 kV S/C (Q) line

Length: 97 ckm  
Locations: 261 nos

Line commissioned in **Aug'18**.

#### (iii) Champa (Pool) – Dharamjaygarh 765 kV S/C (Q) line

- Length: 51.1 ckm
- Locations: 150 nos

Commissioned **Jul'18**.

#### (iv) LILO of one ckt of Aurangabad – Padghe 765 kV D/C (hexa) line at Pune

- Length: 130 ckm
- Locations: 180 nos
- Foundation completed: 176 nos
- Tower erected: 172 nos
- Stringing completed: 117 ckm
- Schedule completion: 22.03.2019
- Anticipated completion: Jun'19

**Constraints where Project Authority requires intervention:**

- a) RoW issue: PGCIL vide their letter dated 01.03.2019 has directed to divert the line terminating at Pune substation as the line alignment was passing over their colony area. thus, the line had to be diverted. Petition filed in CERC, CERC vide its ROP(Records of Proceedings) of hearing dated 20.03.2019 has directed LTTCs not to take any coercive measure against CWRTL till the next date of hearing.

**Status of statutory approvals:****Forest****Nil**

Details of Tr. Line Falling under Forest:- Locations: nos. Length:

Forest area affected (ha) :

Forest proposals submitted on .....

Current status:

**Power line crossing**

Total no. of crossings : 7 nos.

Proposal submitted : 7 nos.

Approval obtained : 7 nos.

**Railway crossing**

Total no. of crossings : Nil

Proposal submitted : Nil

Approval obtained : Nil

**National Highway Crossing**

Total no. of crossings : 1 no.

Proposal submitted : 1 no.

Approval obtained : 1 no.

**River Crossings**

Total no. of crossings : Nil

Proposal submitted : Nil

Approval obtained : Nil

**PTCC approval**

Proposal submitted to BSNL in Oct'2016

Proposal submitted to Railways in Oct'2016

Current status: Approval received on 29.11.2017

**Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation in Oct'2016

Current Status: Approval received on 21.12.2018

**(v) 765 kV bays at Sasan UMPP****Bays Commissioned in Apr'18.**

## **(32) Name of transmission project - Immediate evacuation for North Karanpura(3x660MW) generation project of NTPC(ERSS-XIX)**

### **Background**

NTPC Ltd. has planned to establish a 1980MW (3x660MW) thermal power project at North Karanpura in the state of Jharkhand. Accordingly, Immediate evacuation system for the same was finalized with following transmission system: (i) North Karanpura – Gaya 400kV D/c (Quad) (ii) North Karanpura – Jharkhand Pool (Chandwa) 400kV D/c (Quad) Further, under the 24x7 power for all scheme, Jharkhand has projected a requirement of about 1000MW in Dhanbad region. In view of the same it is proposed to establishment 400/220kV, 2x500 MVA sub-station at Dhanbad along with LILO of both circuits of Ranchi – Maithon-RB 400kV D/c line at Dhanbad. The same was agreed to be implemented as ISTS scheme to be built under TBCB. For drawl of power from Dhanbad, JUSNL would construct 2 no. 220kV D/c lines, one each to Govindpur and Jainamore 220 kV sub-stations.

### **Scope of transmission project:**

1. North Karanpura – Gaya 400kV D/c line with quad moose conductor.
  2. North Karanpura – Chandwa (Jharkhand) Pooling Station 400kV D/c line with quad moose conductor.
  3. LILO of both circuits of Ranchi – Maithon-RB 400kV D/c line at Dhanbad
  4. Creation of 400/220 kV sub-station at Dhanbad(ERSS-XIX)
- (i) Establishment of 400/220 kV, 2x500 MVA sub-station at Dhanbad

#### 400 kV

- ICTs: 400/220 kV, 2x500 MVA
- ICTs bays: 2 no.
- Line bays: 4 no.
- 400 kV bus reactor bays: 2 no.
- Bus reactor: 2x125 MVAR
- Space for future bays: 4 no
- Space for future 400/220 kV, 500 MVA ICT along with associated bay

#### 220 kV

- ICTs bays: 2 no.
- Line bays: 4 no.
- Space for future bays: 4 no.

### **General Details:**

|                                      |                                                                                    |
|--------------------------------------|------------------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : North Karanpura Transco Ltd.<br>(A subsidiary of M/s Adani Transmission Limited) |
| Bid Process Coordinator (BPC)        | : RECTPCL                                                                          |
| Estimated Cost (Rs. crs)             | : 472 crore                                                                        |
| Request for Qualification            | : 30.11.2015                                                                       |
| Request for Proposal                 | : 03.02.2016                                                                       |
| Letter of Intent                     | : 24.05.2016                                                                       |
| Transmission Service Agreement (TSA) | : 06.07.2016                                                                       |
| SPV acquisition                      | : 08.07.2016                                                                       |
| Transmission License by CERC         | : 29.09.2016                                                                       |
| Tariff adoption by CERC              | : 06.09.2016                                                                       |
| Contract Performance Guarantee       | : 03.06.2016                                                                       |

|                                 |   |                                                                                                                                                                                                                                                                                           |
|---------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Clearance u/s 164               | : | submission delayed since NOC is awaited from Central Coalfield Ltd. (CCL) / Ministry of Coal (MoC) on the routes from North Karanpura – Chandwa line (NK-C) and North Karanpura-Gaya. line (NK-G). Newspaper publication completed on 15.10.2016. Re-publication completed on 30.10.2017. |
| Execution plan submitted to CEA | : | 03.11.2016                                                                                                                                                                                                                                                                                |
| NIT issued on                   | : |                                                                                                                                                                                                                                                                                           |
| EPC contract awarded on         | : |                                                                                                                                                                                                                                                                                           |
| Scheduled Date of Completion    | : | 30.09.2019                                                                                                                                                                                                                                                                                |
| Anticipated Date of Completion  | : |                                                                                                                                                                                                                                                                                           |

#### **Status of progress of transmission project:**

##### **1. North Karanpura – Chandwa (Jharkhand) Pooling Station 400kV D/c line**

- Length (as per original route): 63 Ckm
- Locations (as per original route): 112 nos
- Foundation completed: 04 nos
- Tower erected: 00 nos
- Stringing completed: 0 Ckm
- Schedule completion date: Sep 2017

#### **Status of statutory approvals:**

##### **Forest**

Details of Tr. Line Falling under Forest:-

Locations: nos.

Length: Kms

Forest area affected (ha) :

Forest proposals submitted on:

Current status:

##### **Power line crossing**

Total no. of crossings : 2 nos.

Proposal submitted : 1 nos.

Approval obtained : 0 nos.

##### **Railway crossing**

Total no. of crossings : 1 nos.

Proposal submitted : 0 nos.

Approval obtained : 0 nos.

##### **National Highway Crossing**

Total no. of crossings : 0 nos.

Proposal submitted : 0 nos.

Approval obtained : 0 nos.

**River Crossings**

Total no. of crossings : 0 nos.

Proposal submitted : 0 nos.

Approval obtained : 0 nos.

**PTCC approval**

Proposal submitted to Defence on .....

Proposal submitted to BSNL on .....

Proposal submitted to Railways on .....

Current status:

**Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on.....

Current Status:

**2. North Karanpura – Gaya 400kV D/C line**

- Length (as per original route): 185 Ckm
- Locations (as per original route): 265 nos
- Foundation completed: 31 nos
- Tower erected: 00 nos
- Stringing completed: 0 Ckm
- Schedule completion date: Sep 2019

**Status of statutory approvals: NOC on revised route awaited. Details of statutory approvals will be finalised upon receipt of NOC.**

**Forest**

Details of Tr. Line Falling under Forest:-

Locations: nos.

Length:

Forest area affected (ha) :

Forest proposals submitted on .....

Current status:

**Power line crossing**

Total no. of crossings : nos.

Proposal submitted : nos. Date:

Approval obtained : nos. Date:

**Railway crossing**

Total no. of crossings : nos.

Proposal submitted : nos. Date:

Approval obtained : nos. Date:

**National Highway Crossing**

Total no. of crossings : nos.

Proposal submitted : nos. Date:

Approval obtained : nos. Date:

### **River Crossings**

Total no. of crossings : nos.

Proposal submitted : nos. Date:

Approval obtained : nos. Date:

### **PTCC approval**

Proposal submitted to Defence on .....

Proposal submitted to BSNL on .....

Proposal submitted to Railways on .....

Current status:

### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on.....

Current Status:

### **3. Establishment of 400/220 kV, 2x500 MVA sub-station at Dhanbad**

- Land acquired: under process
- Civil works completed : 0%
- Equipment supplied : 0%
- Equipment erected : 0%
- Schedule completion : 07.05.2019

### **Constraints where Project Authority requires intervention:**

### **4. LILO of both circuits of Ranchi – Maithon-RB 400kV D/c line at Dhanbad**

- Length: 2.4 Ckm
- Locations:
- Foundation completed:
- Tower erected:
- Stringing completed:
- Schedule completion date: 07.05.2019

### **Status of statutory approvals:**

#### **Forest**

Details of Tr. Line Falling under Forest:-

Locations: nos.

Length:

Forest area affected (ha) :

Forest proposals submitted on .....

Current status:

### **Power line crossing**

Total no. of crossings : nos.

Proposal submitted : nos. Date:

Approval obtained : nos. Date:

### **Railway crossing**

Total no. of crossings : nos.

Proposal submitted : nos. Date:

Approval obtained : nos. Date:

### **National Highway Crossing**

Total no. of crossings : nos.

Proposal submitted : nos. Date:

Approval obtained : nos. Date:

### **River Crossings**

Total no. of crossings : nos.

Proposal submitted : nos. Date:

Approval obtained : nos. Date:

### **PTCC approval**

Proposal submitted to Defence on .....

Proposal submitted to BSNL on .....

Proposal submitted to Railways on .....

Current status:

### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on.....

Current Status:

### **Constraints where Project Authority requires intervention:**

- CCL & CMPDI disallowed construction on BPC route and suggested a route which involved multi-circuit towers and required piles foundations.
- TSP has requested for TSA termination on 13.04.2018 under article 4.4.2 read with article 11 and article 13.5 of TSA due to continuation of force majeure events.
- A meeting was held in Ministry of Coal in June, 2018 and all stakeholders agreed “in principle” to the routes suggested by CCL and CMPDI. It was advised that implementing agency may choose either of two route options suggested by CCL/CMPDI. During the hearing held on 26.07.2018, NKTL submitted that they would need time to conduct survey to evaluate the feasibility of proposed routes. The proposed NKSTPP-Gaya route avoids CCL command area but beyond the CCL boundary the coal block of M/s Usha Martin is located and the NKSTPP-Gaya line was passing through coal block of Usha Martin and NOC for which got denied by Usha Martin.
- TSA termination notice withdrawn on 10.12.2018, which was allowed by CERC. However, still NoC is awaited from CCL/MoC for construction of the lines over coal bearing area.

- MoC had filed an affidavit requesting CERC to amend the Transmission License condition by mentioning that implementing agency shall shift the line within 24 months from the notice and failing which the agency will be liable to pay the price of coal to CCL.
- In response to MoC's affidavit, NKTL had filed an affidavit on 25.02.2019 undertaking to re-route/divert/shift the transmission lines in future, in accordance with law and the orders passed by CERC, based on the alternate route provided by MoC and CCL.
- CERC vide its order dated 20.03.2019 has disposed off the matter with the decision that MOC will issue NOC within a week of issue of order and CEA will decide the compressed time schedule to complete the project. Alternate route will be provided by MoC, when requirement of shifting arises.

### **(33)Name of transmission project- Transmission System for Ultra Mega Solar Park in Fatehgarh, Distt. Jaisalmer Rajasthan**

#### **Background**

Government of India has taken an initiative for development of Solar Power Parks in various parts of the country. As part of above initiative, Solar Power parks are being developed by various developers near Bhadla & Jaisalmer in Rajasthan.

MNRE has authorised M/s. Adani Renewable Energy Park Rajasthan Ltd. (AREPRL) (JVC of Govt. of Rajasthan and AREPL) as solar park developer for 1500 MW capacity at Fatehgarh, Distt. Jaisalmer, Rajasthan. Out of above generation capacity, M/s. AREPRL has applied for Connectivity & Long Term Access in ISTS for 1000 MW.

To evacuate power from the Fatehgarh UMSP (1000 MW), it was finalized to establish 400 KV Pooling Station at Fatehgarh along with 765 KV Fatehgarh Pool – Bhadla (PG) D/C line (to be operated at 400 KV). Also, in order to address reactive power management aspect including during low / no solar generation periods, 1x125 MVAR bus reactor (at 400 KV bus) at Fatehgarh Pooling Station is finalized.

#### **Scope of transmission project**

1. Establishment of 400 KV pooling station at Fatehgarh
2. 765 kV Fatehgarh Pooling sub-station - Bhadla (PG) D/C line (to be operated at 400 kV).
3. 2 nos of 400 kV line bays at Fatehgarh Pooling substation
4. 1x125 MVAR Bus reactor at 400kV Fatehgarh Pooling sub-station along with associated bay
5. Space for future 220 kV ( 12 Nos. ) line bays.
6. Space for future 400 kV ( 8 Nos. ) line bays along with line reactors at Fatehgarh Pooling station.
7. Space for future 220/400 kV transformers ( 5 nos.) along with associated transformer bays at each level.
8. Space for future 400 KV bus reactors ( 2 nos. ) along with associated bays.

#### **General Details**

|                                      |                                         |
|--------------------------------------|-----------------------------------------|
| Special Purpose Vehicle              | : Fatehgarh-Bhadla Transmission Limited |
| Bid Process Coordinator (BPC)        | : Power Finance Corporation             |
| Estimated Cost (Rs. Crs)             | : 536                                   |
| Request for Qualification            | : 30.12.2016                            |
| Request for Proposal                 | : 30.04.2017                            |
| Letter of Intent                     | : 21.02.2018                            |
| Transmission Service Agreement (TSA) | : 10.01.2018                            |
| SPV acquisition                      | : 14.03.2018                            |
| Transmission License by CERC         | : 27.08.2018 (Order date)               |
| Tariff adoption by CERC              | : 27.08.2018                            |
| Contract Performance Guarantee       | : 12.03.2018                            |
| Clearance u/s 164                    | : 26.10.2018                            |

|                                 |   |                   |
|---------------------------------|---|-------------------|
| Execution plan submitted to CEA | : | 09.07.2018        |
| NIT issued on                   | : |                   |
| EPC contract awarded on         | : |                   |
| Scheduled Date of Completion    | : | <b>30.09.2019</b> |
| Anticipated Date of Completion  | : |                   |

## Status of progress of transmission project:

### (i) 765 kV Fatehgarh Pooling sub-station - Bhadla (PG) D/C line (to be operated at 400 kV)

- Length: 208 ckm
- Locations: 262 nos
- Foundation completed: 24 no
- Tower erected:
- Stringing completed:
- Schedule completion 30.09.2019

## Status of statutory approvals:

### Forest

Details of Tr. Line Falling under Forest:- Length: 0.1 Km

Forest area affected (ha) : 0.6466

Forest proposals submitted on 28.11.2018

Current status: Proposal not recommended by CF, Jodhpur and DFO, Jodhpur stating proposed area is in habitat of critical endangered bird, Great Indian Bustard (GIB). On 05.02.2109, DNP, Jaisalmer has instructed to divert the transmission line outside the GIB arc. FBTL received letter from DNP, Jaisalmer to divert the transmission line outside the GIB arc. Route alignment on the revised route is completed and the revised line length works out to be 152 Kms. On the basis of above, FBTL has served Change in law notice on 26.03.2019.

### Power line crossing

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 5 | nos. |
| Proposal submitted     | : | 0 | nos. |
| Approval obtained      | : | 0 | nos. |

### Railway crossing

|                        |   |   |      |
|------------------------|---|---|------|
| Total no. of crossings | : | 2 | nos. |
| Proposal submitted     | : | 0 | nos. |
| Approval obtained      | : | 0 | nos. |

### National Highway Crossing

|                        |   |   |     |
|------------------------|---|---|-----|
| Total no. of crossings | : | 3 | no. |
| Proposal submitted     | : | 1 | no. |
| Approval obtained      | : | 0 | no. |

### River Crossings

|                        |   |     |
|------------------------|---|-----|
| Total no. of crossings | : | Nil |
| Proposal submitted     | : | Nil |
| Approval obtained      | : | Nil |

**PTCC approval**

Proposal submitted to BSNL in :  
Proposal submitted to Railways in :  
Current status: : proposal under preparation

**Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation in: Sept'2016  
Current Status : Proposal submitted in Dec'18

**(ii) Establishment of 400 KV Pooling Station At Fategarh**

- Land acquisition: As per TSA, to be provided by Beneficiary. Lease agreement on hold due to court order, however, access has been given.
- Engineering: 60%
- Equipment supplied: 0%
- Constrcuton: 5%
- Schedule completion: 30.09.2019

**Constraints where Project Authority requires intervention:**

Beneficiary, i.e. Adani Renewable Energy Park Rajasthan Limited ("AREPRL") has served a Force Majeure (FM) notice on account of Hon'ble High Court order against the petition filed in the Hon'ble High Court of Rajasthan during the course of land acquisition vide their letter dated 04.06.2018, 06.07.2018, 01.09.2018, 19.10.2018 and 03.11.2018. AREPRL has filed a petition in CERC on 02.01.2019 seeking extension of SCOD on account of Force Majeure.

**(iii) 2 nos of 400 kV line bays at Fatehgarh Pooling substation**

- Schedule completion: 30.09.2019
- As per TSA, land to be provided by Beneficiary. Lease agreement on hold due to court order, however, access has been given.

**(iv) 1x125 MVAR Bus reactor at 400kV Fatehgarh Pooling sub-station along with associated bay**

- Schedule completion: 30.09.2019
- As per TSA, land to be provided by Beneficiary. Lease agreement on hold due to court order, however, access has been given.

## **(34) Name of transmission project - Transmission System required for evacuation of power from Kudgi TPS (3x800 MW) Phase-I of NTPC**

### **Background**

NTPC Limited is establishing coal based Kudgi STPP (3x800 MW) generation project at village Kudgi, Bijapur District in the State of Karnataka. NTPC Limited has been granted LTA for 2392.49 MW as per the LTA application and details of drawl of power is given as under:

|                   |            |            |           |
|-------------------|------------|------------|-----------|
| Karnataka Discoms | 1196.24 MW | KSEB       | 119.18 MW |
| TANGEDCO          | 300.10 MW  | AP Discoms | 418.10 MW |

Transmission scheme is planned for the evacuation and supply of power from the Kudgi TPS to the beneficiaries of the generation project. This transmission scheme shall facilitate immediate evacuation as well as supply of power to its beneficiaries with reliability and security. Beyond Madhugiri & Bidadi dispersal of power to the beneficiaries of the generation project shall be through existing/planned transmission network under Inter-State Transmission System.

### **Scope of transmission project**

1. Kudgi TPS - Narendra (New) 400 kV 2 x D/C Quad lines
2. Narendra (New) - Madhugiri 765 kV D/C line (initially operated at 400 kV level)
3. Madhugiri - Bidadi 400 kV D/C (quad) line

### **General Details**

|                                      |   |                                     |
|--------------------------------------|---|-------------------------------------|
| Special Purpose Vehicle (SPV)        | : | Kudgi Transmission Ltd. (L&T Infra) |
| Bid Process Coordinator (BPC)        | : | Rural Electrification Corporation   |
| Estimated Cost (Rs. crs)             | : | 1240                                |
| Request for Qualification            | : |                                     |
| Request for Proposal                 | : | 12.03.2013                          |
| Letter of Intent                     | : | 31.07.2013                          |
| Transmission Service Agreement (TSA) | : | 14.05.2013                          |
| SPV acquisition                      | : | 30.08.2013                          |
| Transmission License by CERC         | : | 07.01.2014                          |
| Tariff adoption by CERC              | : | 08.01.2014                          |
| Contract Performance Guarantee       | : | 22.08.2013                          |
| Clearance u/s 164                    | : | 24.04.2014                          |
| Execution plan submitted to CEA      | : | Submitted                           |
| NIT issued on                        | : |                                     |
| EPC contract awarded on              | : | 21.02.2014                          |
| Scheduled Date of Completion         | : | 28.2.2015/29.12.2015                |
| Actual Date of completion            | : | September, 2016                     |

### **Status of progress of transmission project**

1. Kudgi TPS – Narendra 400 kV 2xD/C line (I&II) - Line 1&2 completed on 27.03.2015 and commissioned in Nov-15 & Jun-16 respectively
2. Narendra (New) – Madhugiri 765 kV D/C line(758 ckm) - Line Commissioned on 23.09.2016 at 400kV
3. Madhugiri (Tumkur) – Bidadi 400 kV D/C line(186 ckm)- Commissioned on 24.8.16

### **Transmission Project Commissioned on Sep-16.**

## **(35) Name of transmission project - Transmission System for Patran 400kV S/S**

### **Background**

Patiala and Sangrur district of Punjab has a lot of agriculture load. A partial Grid Disturbance had taken place on 20<sup>th</sup> July 2011 and analysis of Grid disturbance had also indicated the requirement of a 400/220 kV Substation in this area. In the vicinity there are 5 nos of 220 kV grid stations, namely Mansa, Rajla, Sangrur, Sunam & Patran, having total transformation capacity of about 1180 MVA. In addition, 3 nos of 220 kV new substations are also coming up in the area, at Pasiana, Bangan & Kakarla. Accordingly, to meet the growing load a 400/220 kV substation at Patran has been proposed. The 400/220 kV S/s at Patran would be connected to the grid by LILO of Patial-Kaithal 400 kV D/C. To avoid unbalanced loading, LILO of both circuits is proposed. From these substations, 220 kV lines can be drawn to new Patran, Mansa, Pasiana etc. S/s. Looking into load growth potential it is expected that 800-900 MW load would be there in the vicinity. In view of the above 2x500 MVA transformers have been proposed. Considering the fact that the location of the substation is in a very fertile area of the Punjab where the acquisition of land is going to be a challenging task. Accordingly, it is proposed to develop this substation as Gas Insulated substation.

### **Scope of transmission project**

1. LILO of both circuits of Patiala-Kaithal 400kV D/C line at Patran (Triple snow Bird)
2. 2x500 MVA, 400/220 kV substation at Patran

#### **400 kV**

- Line bays 4 nos
- Transformer bays 2 nos
- Space provision for 6 bays

#### **220 kV**

- Line bays 6 nos
- Transformer bays 2 nos
- Space provision for 6 bays

### **General Details**

|                                     |   |                                                                                                |
|-------------------------------------|---|------------------------------------------------------------------------------------------------|
| Special Purpose Vehicle(SPV)        | : | Patran Transmission Company Ltd. (A subsidiary of Techno Electric and Engineering Company Ltd) |
| Bid Process Coordinator(BPC)        | : | Power Finance Corporation                                                                      |
| Estimated Cost (Rs. crs)            | : | 200                                                                                            |
| Request for Qualification           | : | 11.03.2013                                                                                     |
| Request for Proposal                | : | 10.09.2013                                                                                     |
| Letter of Intent                    | : | 17.09.2013                                                                                     |
| Transmission Service Agreement(TSA) | : | 12.05.2014                                                                                     |
| SPV acquisition                     | : | 13.11.2013                                                                                     |
| Transmission License by CERC        | : | 14.07.2014                                                                                     |
| Tariff adoption by CERC             | : | 05.08.2014                                                                                     |
| Contract Performance Guarantee      | : | 04.09.2013                                                                                     |
| Clearance u/s 164                   | : | 29.02.2016                                                                                     |
| Execution plan submitted to CEA     | : | 05.08.2014                                                                                     |

|                                           |   |                       |
|-------------------------------------------|---|-----------------------|
| NIT issued on                             | : | No NIT issued by PTCL |
| EPC contract awarded on                   | : | 01.02.2014            |
| Scheduled Date of Completion              | : | 11.11.2016            |
| Actual Date of Commissioning              | : | 17.06.2016            |
| Trial run completed (monitored by POSOCO) | : | 18.06.2016            |
| Actual COD                                | : | 21.06.2016            |

**Status of progress of transmission project;**

**1. LILO of both circuits of Patiala-Kaithal 400kV D/C at Patran (Triple snow Bird Conductor)**

|            |           |
|------------|-----------|
| Length:    | 200 meter |
| Locations: | 2         |

**Line Completed on Jun-16**

**2. 2x500 MVA, 400/220 kV Patran substation**

Transmission project completed in June 2016 and commissioned in May 2017. 220 KV downstream transmission lines from Patran S/S competed and commissioned by PSTCL in May 2017.

**Transmission Project Commissioned on May 2017.**

### **(36) Name of transmission project - Transmission System Associated with Krishnapattnam UMPP- Synchronous interconnection between SR and WR (Part-B)**

#### **Background**

For evacuation of power from Krishnapattnam UMPP (4000 MW) and export of power from various IPPs coming up in SR to their target beneficiaries in WR and NR, synchronous integration of the Southern Region with the rest of Indian grid had been planned through two number of 765 KV S/C lines between Sholapur and Raichur. With this interconnection a synchronously connected all India Grid would come into existence. Out of the two 765 KV Raichur- Sholapur lines planned, the Raichur- Sholapur 765 KV line-1 is covered under the scheme "Synchronous interconnection between Southern Region and Western Region" which is to be implemented through tariff based competitive bidding route.

#### **Scope of transmission project**

1. Raichur-Sholapur 765 KV Single Circuit Line-1

#### **General Details**

|                               |   |                                                                                                    |
|-------------------------------|---|----------------------------------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV) | : | Raichur Solapur Trans. Company Limited.<br>(A Consortium of Patel, Simplex infra and BS Transcomm) |
| Bid Process Coordinator (BPC) | : | Rural Electrification Corporation                                                                  |
| Estimated Cost (Rs. crs)      | : | 440                                                                                                |
| SPV acquisition               | : | 7.1.2011                                                                                           |
| Scheduled Date of Completion  | : | 7.1. 2014                                                                                          |
| Actual Date of Completion     | : | 30.6.2014                                                                                          |

#### **Status of progress of transmission project**

1. Raichur-Sholapur 765 kV S/C line-1 – 208 ckm

**Transmission Project commissioned on 30.06.2014 .**

## **(37) Name of transmission project -Transmission system strengthening in Indian system for transfer of power from new HEP's in Bhutan**

### **Background**

Punatsangchhu-I (1200MW), Punatsangchhu-II (990MW), Mangdechhu(720MW) and Wangchhu (570MW) Hydro Generation Projects in Bhutan are at various stages of development. Power from these generation projects would be transferred to India after meeting small local demand in Bhutan. Power from these generation projects is proposed to be brought to Alipurduar sub-station in West Bengal (India). This transmission scheme has been planned for power transfer from Alipurduar onwards to ER and towards NR, it shall be done through + 800 kV, 6000MW Bishwanath Chariyal (Assam) – Alipurduar (West Bengal) – Agra (Uttar Pradesh) HVDC bipole link.

### **Scope of transmission project**

#### **Transmission Lines:**

1. Alipurduar - Siliguri 400 kV D/C line (2nd) with Quad moose conductor
2. Kishanganj - Darbhanga 400kV D/C line with Quad moose conductor

#### **400 kV Bay Requirements:**

1. 400 kV line bays at Darbhanga: 2 nos.
2. 80 MVAR switchable line reactors (400 Ohm NGR) in each circuit at Darbhanga end of Kishanganj - Darbhanga 400kV D/C (quad) line

### **General Details**

|                                     |   |                                                                                  |
|-------------------------------------|---|----------------------------------------------------------------------------------|
| Special Purpose Vehicle(SPV)        | : | Alipurduar Transmission Ltd. (A subsidiary of Kalpataru Power Transmission Ltd.) |
| Bid Process Coordinator(BPC)        | : | Rural Electrification Corporation                                                |
| Estimated Cost (Rs. crs)            | : |                                                                                  |
| Request for Qualification           | : | 16.04.2015                                                                       |
| Request for Proposal                | : | 08.07.2015                                                                       |
| Letter of Intent                    | : | 29.10.2015                                                                       |
| Transmission Service Agreement(TSA) | : | 22.09.2015                                                                       |
| SPV acquisition                     | : | 06.01.2016                                                                       |
| Transmission License by CERC        | : | 21.03.2016                                                                       |
| Tariff adoption by CERC             | : | 22.03.2016                                                                       |
| Contract Performance Guarantee      | : | 04.01.2016                                                                       |
| Clearance u/s 164 in Gazette        | : | 20.10.2016                                                                       |
| Execution plan submitted to CEA     | : | 05.05.2016                                                                       |
| NIT issued on                       | : | N.A.                                                                             |
| EPC awarded on                      | : | 19.01.2016                                                                       |
| Scheduled Date of Completion        | : | 05.03.2019                                                                       |
| Anticipated Date of Completion      | : |                                                                                  |

### **Status of progress of transmission project**

#### **1. Alipurduar (PG) – Siliguri (PG) 400 KV D/C line**

|                       |                                      |
|-----------------------|--------------------------------------|
| Length:               | 232 ckm                              |
| Locations:            | 321 nos                              |
| Foundation completed: | 315 (9 Nos Pile Locations Completed) |
| Tower erected:        | 301 nos.                             |
| Stringing completed:  | 71.67 Ckm                            |
| Schedule Target date: | Mar-19                               |

Anticipated Target date:

**Constraints where Project Authority requires intervention:**

- Severe ROW issues being faced on every location demanding high compensations. (majorly of political nature). Work is being done after clearing locations upon rigorous negotiations with landowners.
- Matter has also been highlighted at DM/SDM/BDO level for early resolution.
- CEA officer held a meeting with District Magistrates of Alipurduar & Jalpaiguri District in Nov, 2018 and requested their support for resolution of ROW issues.
- Few land owners have also filed a case in the court of law, and at 1 location i.e. 108/2, till now 3 nos of court hearings have also been over and next hearing is yet to be announced **(In this (loc no. 108/2), court case almost 4 months have already elapsed in court proceedings till date and further anticipated 2-3 months' time in getting resolution)**. At other locations, court hearing is yet to be started.

The details of locations under Court matter are given under:( Status as on 31-Mar-19)

| Sr No. | Loc No. | Section               | Tower Type | Remarks                                                                                                                                                                                                                                                                                      |
|--------|---------|-----------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1      | 4A/0    | Section I - Siliguri  | NB+13      | There are severe ROW issues for Tower Erection at this location and landowner moved to court. Currently the matter is under Court. A caveat notice is also served on 24th Jan'19 by landowner. The date for arguments is 26.04.19.                                                           |
| 2      | 98/0    | Section IV - Falakata | DC+0       | Landowner send court notice to Local BDO Office. ATL have send response through local lawyer. Final Negotiation is going on. A Petition has also been submitted in the Jalpaiguri DM office under section 16[1D]. The hearing will be on 08/04/19.                                           |
| 3      | 100/4   | Section IV - Falakata | DA+3       | Land owner sent the <b>Court Notice</b> at Local BDO Office on <b>25th Jan'19</b> . ATL have send response through local lawyer. A Petition has also been submitted in the Jalpaiguri DM office under section 16[1D]. The hearing will be on 08/04/19.                                       |
| 4      | 108/2   | Section IV - Falakata | DA+6       | <b>The matter is in court. A show cause notice sent by land owner on 19th Jan'19. After 2nd court hearing, ADM had formed a committee, to measure the effected land to fix the compensation as per court orders. The report has been submitted &amp; next court hearing is on 8-Apr-19..</b> |
| 5      | 107/1   | Section IV - Falakata | DA+6       | Severe ROW issues for Tower Erection at this location and landowner (Mr. Nilamani Das) has served court notice dated 15 <sup>th</sup> Feb'19, regarding temporary injunction order for the work.                                                                                             |

ATL has requested LTTC for their intervention in resolution of ROW issues through state/local administration support, for completion of works at the earliest.

## **Status of statutory approvals:**

### **Forest**

Details of Tr. Line Falling under Forest:- Locations: **NA** Length: **NA**

Forest area affected (ha) : **NA**

Forest proposals submitted on **25-Oct-18**

Current status: **Approval Awaited. Site survey yet to be confirmed by Authority, Permission will be granted from DFO Alipurduar & Jalpaiguri.**

### **Power line crossing**

|                        |      |      |                                                                                                                                                                                                                                                         |
|------------------------|------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Total no. of crossings | : 21 | nos. |                                                                                                                                                                                                                                                         |
| Proposal submitted     | : 21 | nos. | Date: 17-Apr-17, 17-May-17, 4-July-17, 5-Aug-17, 17th Oct'2017                                                                                                                                                                                          |
| Approval obtained      | : 19 | nos. | Date: 1 nos- 16th Feb'17, 3 nos approval on 16th June'17<br>2 nos approval on 7th Oct'17<br><br>1 Nos approval on 11th Nov'17<br><br>3 nos on 16th Jan'18 & 2 nos on 25th Jan'18, 1- 13 th Apr'18 & 2 nos- 29th Jun'18<br><br>2 nos approval in Dec'18. |

### **Railway crossing**

|                        |     |      |                                        |
|------------------------|-----|------|----------------------------------------|
| Total no. of crossings | : 2 | nos. |                                        |
| Proposal submitted     | : 2 | nos. | Date: 13-Sept-17                       |
| Approval obtained      | : 2 | nos. | Date: 1 no on 22nd Jan'18, 27th Dec'17 |

### **National Highway Crossing**

|                        |     |      |                                |
|------------------------|-----|------|--------------------------------|
| Total no. of crossings | : 3 | nos. |                                |
| Proposal submitted     | : 3 | nos. | Date: 25th May'17, 3rd June'17 |
| Approval obtained      | : 0 | nos. | Date:                          |

On 9th Mar'19, NHAI has uploaded for public notification.

### **River Crossings**

|                        |      |      |       |
|------------------------|------|------|-------|
| Total no. of crossings | : NA | nos. |       |
| Proposal submitted     | : NA | nos. | Date: |
| Approval obtained      | : NA | nos. | Date: |

Current Status: The proposal is with Chief Secretary, Irrigation Dept, Kolkata.

### **PTCC approval –**

Proposal submitted to Defence on : 16th May'18

Proposal submitted to BSNL on: 16th May'18

Proposal submitted to Railways on : 16th May'18

Current status: NOC from Defence for WB section is received. Awaiting for PTCC Telecommunication

### **Defence/Civil Aviation**

Proposal submitted to Defence/Civil Aviation on: 23rd Jun'18 (Online)

Current Status: Processed from Bagdogra to Shilong AirBase and final NOC will be Given by Shilong.

The clearance/approval from following Govt. Authorities is awaited:

| Sr. No | Description                                                                                                                                        | Submission Date | Approval Status |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|
| 1      | <b>Pending Power Line Crossings (2 nos)</b><br>9/0-9A/0- 0.118KM<br>81/0-82/0-0.274KM <b>Total = 0.392 KM</b>                                      | 17-Oct-17       | Awaited         |
| 2      | <b>Pending NH Crossing Permission (for 3 crossings)</b><br>59/0-60/0 - 0.225KM<br>89/0-90/0- 0.241KM<br>114/0-115/0-0.245KM <b>Total = 0.711KM</b> | 22-May-17       | Awaited         |
| 3      | <b>Defense Aviation</b>                                                                                                                            | 31-Aug-18       | Awaited         |
| 4      | <b>Social Forest/Trees in Govt. Land</b>                                                                                                           | 25-Oct-18       | Awaited         |

## 2. Kishanganj (PG) – Darbhanga (DMTCL) 400 KV D/C line

Length : 209 ckm  
Locations : 545 nos.

Line Ready for Charging as on SCOD & Line Test Charged on 6<sup>th</sup> Mar'19 within schedule.

### Status of statutory approvals:

#### Social Forest

Details of Tr. Line Falling under Forest:- Locations: NA nos. Length:NA

Forest area affected (ha) : NA

Forest proposals submitted on : 16-Aug-18

Current status: Site inspection completed for all districts

(Arariya,Darbhanga,Kishanganj,Madhepura, Supaul) and proposal is now at nodal office patna for receipt of FRA. After receiving FRA it will be sent to Ranchi for Final NOC .

#### Defence/Civil Aviation

Proposal submitted to Defence/Civil Aviation on: 23rd June'2018 (Online)

Current Status : Kishanganj Civil-2 No.s is approved & Saharsha Civil -01 No., Darbhanga -1 No is Pending

## 3. 2 nos 400 kV line bays at Darbhanga and 80 MVAR switchable line reactors

Land acquired : 100% (Land provided by DMTCL)  
Civil works completed : 100%  
Equipment supplied : 100%  
Equipment erected : 100%  
Schedule COD : Mar '19  
Anticipated COD :

### Constraints if any:

## **(38) Name of transmission project - North Eastern Region Strengthening Scheme (NERSS-VI)**

### **Background**

The expansion of 400 kV network in NER is planned through new 400 kV line and up gradation of existing 400 kV lines presently charged at 132 kV to its rated voltage of 400 kV. A 400 kV ring is being established in Assam and Meghalaya connecting Silchar – Misa – Balipara – Bongaigaon – Azara/Byrnihat - Silchar substations. Another 400 kV ring in being established interconnecting Assam and Tripura through Silchar – Palatana – Surajmaninagar – P. K. Bari – Silchar corridor.

The extension of 400 kV system to the states of Manipur and Nagaland by interconnecting them with Assam has been planned through a 400 kV ring connecting Silchar- Imphal – New Kohima – New Mariani – Misa – Silchar along with new 400 kV substation at New Mariani and charging the New Mariani – Misa line at its rated voltage of 400 kV. Additionally, the Silchar- Imphal – New Kohima- New Mariani – Misa corridor would be an alternate for Silchar – Misa line.

The present scheme will form the Imphal – New Kohima – New Mariani section of Silchar- Imphal – New Kohima – New Mariani – Misa – Silchar 400 kV ring along with establishment of new 400/200 kV substation at New Kohima. This would require up gradation of the New Mariani S/s of POWERGRID to 400 KV and LILO of the Kathalguri – Misa D/C line at New Mariani S/s along with charging of Misa – New Mariani section at rated voltage of 400 KV (under the scope of POWERGRID). The New Mariani – Kathalguri section would be kept charged at 220 KV.

The subject scheme has been approved in the 5<sup>th</sup> Standing Committee Meeting on Power System Planning of North Eastern Region held on 08-08-2015 at Imphal, 15<sup>th</sup> NERPC/TCC meeting held on 21-08-2015 at Guwahati and 35<sup>th</sup> Empowered Committee meeting on Transmission held on 14-09-2015 at New Delhi.

### **Scope of transmission project**

1. Establishment of 400/220 kV, 7x167 MVA s/s at new Kohima

#### 400 kV

ICTs: 400/220 kV, 7x167 MVA

ICTs bays: 2 nos.

Line bays: 4 nos.

Bus Reactor: 2x125 MVAR

400 kV bus reactor bays: 2 nos.

Space for future bays: 4 nos. (along with space for switchable line reactor)

#### 220 kV

ICTs bays: 2 nos.

Line bays: 4 nos.

Space for future bays: 4 nos.

Space for 400/220 kV 500 MVA ICT along with associated bays

2. Imphal-New Kohima 400 kV D/C line (Twin Moose ACSR)
3. New Kohima -New Mariani 400 kV D/c line (Twin Moose ACSR)

## General Details

|                                      |   |                                      |
|--------------------------------------|---|--------------------------------------|
| Special Purpose Vehicle              | : | Kohima-Mairani Trans. Ltd(Kalpataru) |
| Bid Process Coordinator (BPC)        | : | Power Finance Corporation            |
| Estimated Cost (Rs. Crs)             | : | 653                                  |
| Request for Qualification            | : | 15.02.2016                           |
| Request for Proposal                 | : | 25.11.2016                           |
| Letter of Intent                     | : | 17.01.2017                           |
| Transmission Service Agreement (TSA) | : | 02.09.2016                           |
| SPV acquisition                      | : | 31.03.2017                           |
| Transmission License by CERC         | : | 10.07.2017                           |
| Tariff adoption by CERC              | : | 06.07.2017                           |
| Contract Performance Guarantee       | : | 07.03.2017                           |
| Clearance u/s 164                    | : | Obtained in Feb'18                   |
| Execution plan submitted to CEA      | : | 29.07.2017                           |
| NIT issued on                        | : | 14.01.2016                           |
| EPC contract awarded on              | : | 28.06.2017                           |
| Scheduled Date of Completion         | : | Jul'20                               |
| Anticipated Date of Completion       | : | Jul'20                               |

## Status of progress of transmission project

- Establishment of 400/220 kV, 7x167 MVA s/s at new Kohima
 

|                       |   |                                               |
|-----------------------|---|-----------------------------------------------|
| Land acquired         | : | Completed                                     |
| Civil works completed | : | Land clearance done , benching Under progress |
| Equipment supplied    | : | Yet to start                                  |
| Equipment erected     | : | Yet to start                                  |
| Schedule COD          | : | Jul'20                                        |
| Anticipated COD       | : | Jul'20                                        |

## Constarints where Project Authority requires intervention: NA

- Imphal-New Kohima 400 kV D/C line

|                       |   |                 |
|-----------------------|---|-----------------|
| Length                | : | 134 Km approx.  |
| Locations             | : | 317 Nos approx. |
| Foundation completed: | : | 137 nos         |
| Tower erected:        | : | 74 nos          |
| Stringing completed   | : | Yet to start    |
| Schedule COD          | : | Jul'20          |
| Anticipated COD       | : | Jul'20          |

## Constraints where Project Authority requires intervention:

- Due to non-existence of land compensation policy in Nagaland state, the land owners in Nagaland are not accepting the compensation offered for construction of transmission line (Affecting 80 locations in Nagaland of Imphal-New Kohima Line)

| Line Name                  | Imphal – New Kohima |          | New Kohima – Mariani |       | Total |
|----------------------------|---------------------|----------|----------------------|-------|-------|
| State→                     | Manipur             | Nagaland | Nagaland             | Assam | Scope |
| Scope                      | 236                 | 81       | 93                   | 192   | 602   |
| Foundation (Till March 19) |                     |          |                      |       |       |

|                                 |     |    |    |     |     |
|---------------------------------|-----|----|----|-----|-----|
| Completed                       | 107 | 30 | 34 | 146 | 317 |
| Balance                         | 129 | 51 | 59 | 46  | 285 |
| <b>Erection (Till March 19)</b> |     |    |    |     |     |
| Completed                       | 74  | 0  | 0  | 105 | 179 |
| Balance                         | 162 | 81 | 93 | 87  | 423 |

- 2) Difficulties in implementation of Guidelines for payment of compensation towards damages in regards to Right of Way (no 3/7/2015-Trans dated 15th Oct. 2015) in Assam & Manipur – resulting into delay in construction activities.

#### **Status of statutory approvals:**

##### **Forest**

Details of Tr. Line Falling under Forest:-

Locations: 91 nos. Approx. ,

Length: 41.647 KM

Forest area affected (ha) : 191.62

Forest proposals submitted on 14.08.2017 (online) & 28.08.20017 (Hard copy).

**Status:** FRA received from DC of Kangpokpi & Senapati districts. Tree Enumeration site visit by DFO Kangpokpi & Senapati completed. Both the DFOs have uploaded their reports in their respective portal and under review at Conservator's office. Tree enumeration report submitted by DFO has been reviewed & changed by CF resulting in reduction of number of trees by 8000 (from 20000 to 12000). Both the DFOs have uploaded their reports in their respective portal in their respective portal as well as Conservator has forwarded the report to Nodal Officer on 31st July' 18. After review by Nodal Office, the file forwarded to Secretariat on 9<sup>th</sup> August 2018 and after reviewed at Secretariat, the proposal forwarded to the office of Honourable Minister of Forest & Environment, Govt. of Manipur on 18.08.2018. The Note Sheet for Forest Proposal got signed on 20.08.2018 from Honourable Minister of Forest & Environment, Govt. of Manipur, Chief Secretary, Govt. of Manipur and the forest proposal file have been forwarded to Regional forest office Shillong on 06 sept, 2018 and the proposal is under review at Shillong & Site visit from R O Shillong has also been completed on 14.11.2018. Stage 1 approval received on 24.01.2019 (Forest payment Paid) and also the file of working permission has been approved by forest office and same is currently at secretariat office

**Current Status : Working permission has granted on 07.03.2019**

##### **Power line crossing**

Total no. of crossings : 11 nos.  
Proposal submitted : 11 nos. Date: 28.03.19 (latest submission date)  
Approval obtained : nos. Date:  
Status : 11 case under process at Concerned Authority.

##### **Railway crossing**

Total no. of crossings : 0 nos.  
Proposal submitted : nos. Date:  
Approval obtained : nos. Date:

##### **National Highway Crossing**

Total no. of crossings : 9 nos(submission targeted on 20.07.2018)  
 Proposal submitted : 6 nos. Date: 26.02.2019 (latest submission date)  
 Approval obtained : 1 nos. Date: 22.11.2018  
 Status : 06 cases under process at Concerned Authority.

### River Crossings

Total no. of crossings : 0 nos.  
 Proposal submitted : nos. Date:  
 Approval obtained : nos. Date:

### PTCC approval

Proposal submitted to Defence on ..... ( Submission targeted by January 2020)  
 Proposal submitted to BSNL on .....  
 Proposal submitted to Railways on .....  
 Current status:

### Defence/Civil Aviation

Defence Proposal submitted on 13.02.2019  
**Current Status:** Under process at Defence Office.  
 Civil Aviation Proposal submitted on 13.02.2019  
**Current Status:** under process at AAI office.

### 3. New Kohima -New Mariani 400 kV D/c line

Length: 120 Km  
 Locations: 285 Nos.  
 Foundation completed: 180 nos.  
 Tower erected: 105 Nos  
 Stringing completed: 4.205 KM  
 Schedule COD: Jul'20  
 Anticipated COD: Jul'20

### Constraints where Project Authority requires intervention:

- 1) Due to non-existence of land compensation policy in Nagaland state, the land owners in Nagaland are not accepting the compensation offered for construction of transmission line (Affecting 93 locations in Nagaland of New Kohima – Mariani Line).

| Line Name                         | Imphal – New Kohima |          | New Kohima – Mariani |       | Total |
|-----------------------------------|---------------------|----------|----------------------|-------|-------|
| State→                            | Manipur             | Nagaland | Nagaland             | Assam | Scope |
| Scope                             | 236                 | 81       | 93                   | 192   | 602   |
| <b>Foundation (Till March 19)</b> |                     |          |                      |       |       |
| Completed                         | 107                 | 30       | 34                   | 146   | 317   |
| Balance                           | 129                 | 51       | 59                   | 46    | 285   |
| <b>Erection (Till March 19)</b>   |                     |          |                      |       |       |
| Completed                         | 74                  | 0        | 0                    | 105   | 179   |
| Balance                           | 162                 | 81       | 93                   | 87    | 423   |

- 2) Difficulties in implementation of Guidelines for payment of compensation towards damages in regards to Right of Way (no 3/7/2015-Trans dated 15th Oct. 2015) in Assam & Manipur – resulting into delay in construction activities.

### **Status of statutory approvals:**

#### **Forest**

Details of Tr. Line Falling under Forest:-

Locations: 11 nos. Approx ,

Length: 4.3 Km

Forest area affected (ha) : 19.976

Forest proposals submitted on 09.08.2017

**Status:** FRA NOC from District Collector received on 29.11.2017 and the same has been uploaded on MoEF website along with hardcopy submission to DFO Office- Golaghat. Forest proposal is approved from Nodal officer and subsequently submitted to DFO office. Tree enumeration done and duly signed list from Forester & Ranger submitted to DFO. Tree enumeration report submitted by Ranger on dated 2nd Apr'18 to DFO. Coordinates of the Double degraded forest area was provided by CF on 16.06.18. The CA Land estimate approved by the DFO, Golaghat and CF, Jorhat. Forest Diversion proposal was uploaded on MoEF website on 18.07.2018. CF site visit & CA land visit completed on 20.08.2018. The proposal has been uploaded in MoEF website by CF, Jorhat on 18.09.2018 and the file was subsequently submitted at Nodal Office, Guwahati for further processing. The forest proposal has been forwarded on 26.11.2018 by Nodal office Guwahati to Additional Secretary Ministry of Forest Government of Assam for further processing.

**Current Status:-** Stage-1 approval is received on 26.01.2019 (Forest payment Paid) and currently the file of working permission is at DFO office for further processing.

#### **Power line crossing**

|                        |                 |      |                  |
|------------------------|-----------------|------|------------------|
| Total no. of crossings | : 1             | nos  |                  |
| Proposal submitted     | : 1             | nos. | Date: 03/12/2018 |
| Approval obtained      | :               | nos. | Date:            |
| Status                 | : Under Process |      |                  |

#### **Railway crossing**

|                        |     |      |       |
|------------------------|-----|------|-------|
| Total no. of crossings | : 0 | nos. |       |
| Proposal submitted     | :   | nos. | Date: |
| Approval obtained      | :   | nos. | Date: |

#### **State Highway Crossing**

|                        |     |                             |       |
|------------------------|-----|-----------------------------|-------|
| Total no. of crossings | : 5 | nos (Approval Not required) |       |
| Proposal submitted     | :   | nos.                        | Date: |
| Approval obtained      | :   | nos.                        | Date: |

#### **River Crossings**

|                        |     |                              |       |
|------------------------|-----|------------------------------|-------|
| Total no. of crossings | : 5 | nos. (Approval Not required) |       |
| Proposal submitted     | :   | nos.                         | Date: |
| Approval obtained      | :   | nos.                         | Date: |

**PTCC approval**

Proposal submitted to Defence on ..... ( Submission targeted by January 2020)

Proposal submitted to BSNL on .....

Proposal submitted to Railways on .....

Current status:

**Defence/Civil Aviation Proposals**

Defence Proposal submitted on 13.02.2019

**Current Status:** Under process at Defence Office.

Civil Aviation Proposal submitted on 13.02.2019

**Current Status:** under process at AAI office.

**(39) Name of transmission project - System strengthening in NR for import of power from North Karanpura and other projects outside NR and system strengthening in WR for import of power from North Karanpura and other projects outside Western Region and also for projects within Western Region**

**Background**

Transmission system for power evacuation from North Karanpurahas been evolved in a comprehensive manner along-with evacuation system for Maithon RB and other generation projects of DVC viz. Koderma, BokaroExtn, Mejia Extn, Durgapur and Raghunathpur and Maithon RB. The comprehensive system consists of common and generation specific transmission schemes. Corresponding to injection of power from North Karanpura and the other generation projects in ER, both NR and WR would require system strengthening. Out of the comprehensive plan of system strengthening, the elements identified for commissioning matching with North Karanpura have been covered under this scheme.

**Scope of transmission project**

1. Lucknow – Bareilly 765 kV D/C line
2. Bareilly – Meerut 765 kV D/C line
3. Agra – Gurgaon(ITP) 400 kV D/C line
4. Gurgaon(ITP) – Gurgaon (PG) 400 kV D/C line
5. Gurgaon (ITP) 400/220 kV GIS Substation
6. Sipat/Korba pooling station – Seoni 400 kV D/C line

**General Details**

|                                      |                                                                       |
|--------------------------------------|-----------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : North Karanpura Transmission Company Ltd.<br>(A subsidiary of RPTL) |
| Bid Process Coordinator (BPC)        | : Rural Electrification Corporation                                   |
| Estimated Cost (Rs. Crs)             | : 2700                                                                |
| Request for Qualification            | : 06.10.2008                                                          |
| Request for Proposal                 | : 08.05.2009                                                          |
| Letter of Intent                     | : 18.12.2009                                                          |
| Transmission Service Agreement (TSA) | : 10.09.2009                                                          |
| SPV acquisition                      | : 20.05.2010                                                          |
| Transmission License by CERC         | : 22.12.2010                                                          |
| Tariff adoption by CERC              | : Matter was in CERC for revision of tariff                           |
| Contract Performance Guarantee       | : 17.05.2010                                                          |
| Clearance u/s 164                    | : 12.08.2013                                                          |
| Execution plan submitted to CEA      | : 13.10.2010 and 28.10.2010                                           |
| NIT issued on                        | :                                                                     |
| EPC awarded on                       | : 27.10.2010                                                          |
| Scheduled Date of Completion         | : 20.11.2013                                                          |
| Anticipated Date of Completion       | : Matter with APTEL                                                   |

**Status of progress of transmission project:**

The Company had approached Central Electricity Regulatory Commission (CERC) for allowing tariff revision and Force Majeure due to delay in grant of clearance u/s 164 of

Electricity Act (EA). CERC notified an unfavorable order dated 09.05.2013, which was later challenged by NKTCL in Appellate Tribunal for Electricity (ATE). ATE allowed the appeal filed by company and set aside the unfavorable CERC order.

Pursuant to the ATE Order dated 02.12.2013, written requests were sent to the beneficiaries seeking following main reliefs to mitigate effect of Force Majeure in line with the prayers allowed in appeal:

- a) Re-fixation of implementation time of the Project as was originally envisaged considering zero date as issuance of section 68 approval from MoP.
- b) Tariff Increase to the tune of 160%.

Concerned utilities in Tamilnadu, Gujarat and Maharashtra have appealed against the order of ATE in the Supreme Court of India. First hearing was held on March 07, 2014 in case of Gujarat and April 21, 2014 in case of Maharashtra. The Tamilnadu petition has been merged with Gujarat. The matter is going in the Registrar court and notices are being served on all the beneficiaries. Once the servicing is complete the matter will be argued in Supreme Court. All the petitions filed by beneficiaries have been clubbed together by SC. The petition has been admitted and next hearing is awaited.

Further, on March 04, 2014, CERC reopened Power Grid Corporation of India Limited's (PGCIL) petition nos. 19 and 20 seeking revocation of license of the company and transferring the project to them on cost plus model and at the risk and cost of Reliance Power Transmission Limited (the Holding Company). CERC notified an order dated 02 Sep 2015, against the said petition for revocation of transmission license. NKTCL filed Appeal No. 200 of 2015 & IA-337 of 2015 in ATE challenging the above mentioned CERC order. ATE rejected the IA meant for stay but allowed the appeal. NKTCL filed a Civil Appeal number 9291 of 2015, in SC against ATE's order. Supreme Court has given a stay order directing no coercive action to be taken by CERC.

SC on 12<sup>th</sup> August has disposed of the appeal and directed ATE to decide on the appeal. An Interim Application (IA Nos. 479 & 480 of 2018) was filed in ATE. APTEL in its hearing dated 01<sup>st</sup> Feb 19 disposed off the case directing to go back to CERC for a fresh treatment - including (but not limited to) the aspect of the very necessity of NK and TT transmission system. A petition has been filed with a stay application in CERC for redressal of grievances. Hearing expected in April'19.

## **(40) Name of transmission project - Augmentation Talcher-II Transmission System**

### **Background**

Talcher-II (4x500 MW) generation project of NTPC is located in Orissa. All the units of the generation project are already in operation. Earlier total power from this project was allocated to the states of Southern Region. Subsequently in April 2007 power allocation of Talcher-II has been revised.

For power evacuation from this project to the Southern Region a +/- 500kV 200MW HVDC bi-polar line from Talcher in Eastern Region to Kolar in Southern Region and 400 kV lines beyond Kolar is in operation however, under contingency of outage of one pole of HVDC line, there is constraint in evacuation of power from Talcher-II to Southern Region. An outage of one pole also causes jerk in Eastern-Western-Northern Region, which are operating in synchronism and result in overloading on some of the transmission lines in Eastern and Western Regions. The Talcher- Behrampur– Gazuwaka 400 kV D/C line with series compensation and switching station at Behrampur and the Talcher - Rourkela 400 kV D/C Quad line have been evolved to augment the Talcher-II Transmission System so as to provide a backup system to meet the contingency outage of one pole and increase the reliability of the system. With this system, it would be possible to schedule the power flow on Talcher - Kolar HVDC and Gazuwaka HVDC back to back in such a manner that the reliable evacuation of power from Talcher-II would be ensured.

### **Scope of transmission project**

1. Talcher II- Rourkela 400 kV D/C Quad line
2. Talcher II – Behrampur 400 kV D/C line
3. Behrampur- Gazuwaka 400 kV D/C line
4. 2x315 MVA, 400/220 kV Behrampur substation

### **General Details**

|                                      |   |                                                                |
|--------------------------------------|---|----------------------------------------------------------------|
| Special Purpose Vehicle (SPV)        | : | Talcher-II Transmission Company Ltd.<br>(A subsidiary of RPTL) |
| Bid Process Coordinator              | : | Rural Electrification Corporation                              |
| Estimated Cost (Rs. crs)             | : | 1400                                                           |
| Request for Qualification            | : | 06.10.2008                                                     |
| Request for Proposal                 | : | 08.05.2009                                                     |
| Letter of Intent                     | : | 18.12.2009                                                     |
| Transmission Service Agreement (TSA) | : | 10.09.2009                                                     |
| SPV acquisition                      | : | 27.04.2010                                                     |
| Transmission License by CERC         | : | 08.11.2010                                                     |
| Tariff adoption by CERC              | : | Matter in CERC for revision of tariff                          |
| Contract Performance Guarantee       | : | 22.04.2010                                                     |
| Clearance u/s 164                    | : | 12.08.2013                                                     |
| Execution plan submitted to CEA      | : | 13.10.2010 and 28.10.2010                                      |
| Scheduled Date of Completion         | : | 27.10.2012                                                     |
| Anticipated Date of Completion       | : | Matter with APTEL                                              |

### **Status of progress of transmission project**

1. Talcher II – Rourkela 400 kV D/C (Q) line
2. Talcher II – Behrampur 400 kV D/C line

**3. Behrampur – Gazuwaka 400 kV D/C line**  
**4. 2x315 MVA, 400/220 kV Behrampur substation**

The Company had approached Central Electricity Regulatory Commission (CERC) for allowing tariff revision and Force Majeure due to delay in grant of clearance u/s 164 of Electricity Act (EA). CERC notified an unfavorable order dated 09.05.2013, which was later challenged by TTCL in Appellate Tribunal for Electricity (ATE). ATE allowed the appeal filed by company and set aside the unfavorable CERC order.

Pursuant to the ATE order dated 02.12.2013, written requests were sent to the beneficiaries seeking following main reliefs to mitigate effect of Force Majeure in line with the prayers allowed in appeal:

- a) Re-fixation of implementation time of the Projects as was originally envisaged considering zero date as issuance of section 68 approval from MoP.
- b) Tariff Increase to the tune of 90%.

Concerned utilities in Tamil Nadu have appealed against the order of ATE in the Supreme Court of India (SC). First hearing was held on August 1, 2014. The matter is still pending before Supreme Court. All the petitions filed by beneficiaries have been clubbed together by SC. The petition has been admitted and next hearing is awaited.

Further, on March 04, 2014, CERC has reopened Power Grid Corporation of India Limited's (PGCIL) petition nos. 19 and 20 seeking revocation of license of the company and transferring the project to them on cost plus model and at the risk and cost of Reliance Power Transmission Limited (the Holding Company).

CERC notified an order dated 02 Sep 2015, against the said petition for revocation of transmission license. TTCL filed Appeal No. 201 of 2015 & IA-338 of 2015 in ATE challenging the above mentioned CERC order. ATE rejected the IA meant for stay but allowed the appeal. TTCL filed a Civil Appeal number 13370 of 2015, in SC against ATE's order. Supreme Court has given a stay order directing no coercive action to be taken by CERC.

SC on 12<sup>th</sup> August has disposed of the appeal and directed ATE to decide on the appeal. An Interim Application (IA Nos. 479 & 480 of 2018) was filed in ATE. APTEL in its hearing dated 01<sup>st</sup> Feb 19 disposed off the case directing to go back to CERC for a fresh treatment - including (but not limited to) the aspect of the very necessity of NK and TT transmission system. A petition has been filed with a stay application in CERC for redressal of grievances. Hearing expected in April'19.

## **(41)Name of transmission project - Transmission system associated with DGEN TPS (1200 MW) of Torrent Power Ltd.**

### **Background**

This transmission scheme has been proposed for evacuation of power from DGEN TPS (1200MW) of Torrent Power Limited. DGEN Transmission Company Limited awarded through TBCB route shall implement the project.

### **Scope of transmission project**

1. DGEN TPS – Vadodara 400 kV D/C line
2. Navsari - Bhesatan 220 kV D/C line

### **General Detail**

|                                     |   |                                                                                            |
|-------------------------------------|---|--------------------------------------------------------------------------------------------|
| Special Purpose Vehicle (SPV)       | : | DGEN Transmission Company Ltd.<br>(A subsidiary of M/s Instalaciones Inabensa, S.A. Spain) |
| Bid Process Coordinator (BPC)       | : | Power Finance Corporation                                                                  |
| Estimated Cost (Rs. crs)            | : | 275                                                                                        |
| Request for Qualification           | : | 30.10.2012                                                                                 |
| Request for Proposal                | : | 25.03.2014                                                                                 |
| Letter of Intent                    | : | 19.05.2014                                                                                 |
| Transmission Service Agreement(TSA) | : | 30.04.2014                                                                                 |
| SPV acquisition                     | : | 17.03.2015                                                                                 |
| Transmission License by CERC        | : | 24.06.2015                                                                                 |
| Tariff adoption by CERC             | : | 10.06.2015                                                                                 |
| Contract Performance Guarantee      | : | 13.03.2015                                                                                 |
| Clearance u/s 164                   | : | 22.04.2016                                                                                 |
| Execution plan submitted to CEA     | : | 10.07.2015                                                                                 |
| NIT issued on                       | : | -                                                                                          |
| EPC contract awarded on             | : | 30.06.2015                                                                                 |
| Scheduled Date of Completion        | : | 16.05.2018                                                                                 |
| Anticipated Date of Completion      | : | DTCL requested to scrap project                                                            |

### **Status of Progress of transmission project**

- Project authority had not started construction activity as per execution plan. Matter was taken up with the project authority and notice served in August/Sept 2016 but project authority did not respond.
- Member(PS), CEA took a meeting on 26.04.2017 to review the progress of Tr. project wherein project authority informed to close the project due to financial constraints in parent company. CEA vide letter dated 14.06.2017 informed CERC to take appropriate action.